

10/506513

1 ATGGTGCTCT CCCAGGAGGA GCGGGACTCC GCGGGGGGCA CGAGGGAGGC
 51 GCAGCGCGTC GGCCCCGGC CCACGGGGC CGCTCGCGG CGCGGGGGCG
 101 GACCCCTGGA CAGCCCCGAG GCGGCTGTG AGAAGGTGGA GTGAGGCTG
 151 CGGGGGCCGG CGACCGCGGA GCCCCATGAG CCCCCCGAAC CCCCCGGAGGG
 201 CGGCTGGGC TGCGCTGGTGA TGCTGGCCGC CATGTTGGTGC AACGGGGTGG
 251 TGTTCGGCAT CGAGAACGCT TGCGGGGTGC TCTTCGTGTC CATGCTGGAA
 301 ACCTTCGGCT CCAAAGACGA TGACAAGATG GTCTTAAGA CAGCAGCATG
 351 GGTAGGTTCT CTCTCCATGG GGATGATTTC TTTCCTGCTGC CCAATAGTCA
 401 CGCTCTCAC AGACCTATT GGTTGTGGGA AAACAGCTGT CGTGGGTGCT
 451 GCTGTTGGAT TTGTTGGGCT CATGTCAGT TCCTTTGTA GTTCCATCGA
 501 GCCTCTGTAC CTTACCTATG GAATCATATT TGCGCTGGC TGCTCTTTG
 551 CATAACAGCC TTCATGGTC ATTTGGAC ACTATTCAA GAAGGGCCTT
 601 GGACTGGTGA ATGGCATTTG CACTGCTGGC AGCAGTGTCT TCACAATCT
 651 GCTGCCCTTG CTCTTAAGGG TTCTGATTGA CAGCGTGGC CTCTTTTACA
 701 CATTGAGGGT GCTCTGCATC TTCAATGTTG TTCTCTTCT GGCTGGCTT
 751 ACTTACCGAC CTCTTGCTAC CAGTACAAA GATAAAGAGA GTGGAGGTAG
 801 CGGATCCTCC CTCTTTCCA GGAAAAAGTT CAGTCCTCCA AAAAAAATT
 851 TCAATTTCG CACTTTTGG ATACTTTGTG CCTTATGTTG ACTTGTGAA
 901 ATACCACTTG CACTTTTGG ATACTTTGTG CCTTATGTTG ACTTGTGAA
 951 ACATGAAAT GAAAGATTTG AAGATGAAAA AAATAAAAGAG GTTGTCTCA
 1001 TGTGATTGG CGTCACITCA GGAGTTGGAC GACTGCTCTT TGCGGGATT
 1051 GCAGATTATG TGCGCTGGTGT GAAGAAGGT TATCTACAGG TACTCTCC
 1101 TTCTTCATT GGTCTGATGT CCATGATGAT TCCTCTGTGT AGCATCTT
 1151 GGGCCCTCAT TGCTGTGTGC CTCACTCATGG GTCTCTTGA TGATGCTTC
 1201 ATTTCCATTA TGCGCTCCAT AGCCCTTGAG TTAGTTGGTG CCCAGGATGT
 1251 CTCCCCAGCA ATTGGATTTC TGCTCGGATT CATGTCCTATA CCCATGACTG
 1301 TTGGCCACC CATTGCGAGGG TTACTTCGTG ACAAACTGGG CTCCCTATGAT
 1351 GTGGCATTCT ACCTCGCTGG AGTCCCCTCC CTTATTGGAG GTGCTGTGCT
 1401 TTGTTTATC CGTGGATCC ATAGTAAGAA GCAAAGAGAG ATCAAGTAAAA
 1451 CCACTGGAAA AGAAAAGATG GAGAAAATGT TGGAACCA GAACTCTCTG
 1501 CTGTCAAGTT CATCTGGAT GTTCAAGAAA GAATCTGACT CTATTATTTA
 1551 A (SEQ ID NO: 1)

FEATURES:

Start Codon: 1

Stop Codon: 1549

FIGURE 1A

HOMOLOGOUS PROTEINS:**Top BLAST Hits:****Top 10 BLAST Hits:**

Sequences producing significant alignments:

			Score (bits)	E value
CRA 62000057354769	/altid=gi 14090278	/def=dbj BAB55595.1 (ABO...	874	0.0
CRA 18000004921871	/altid=gi 5730045	/def=ref NP_006508.1 (NM...	527	e-148
CRA 18000004921870	/altid=gi 7513431	/def=pir I38495 X-linked ...	527	e-148
CRA 18000005134802	/altid=gi 6677997	/def=ref NP_033223.1 (NM...	516	e-144
CRA 163000000492387	/altid=gi 8923981	/def=ref NP_061063.1 (NM...	402	e-110
CRA 224000009228679	/altid=gi 17389922	/def=db AAH17968.1 AAH17...	399	e-109
CRA 89000000201355	/altid=gi 7299667	/def=gb AAF54851.1 (AE003...	353	1e-95
CRA 224000007378350	/altid=gi 16768034	/def=gb AAL28236.1 (AY0...	353	1e-95
CRA 18000005086356	/altid=gi 7449989	/def=pir JCS507 monocarbo...	189	2e-46
CRA 18000005075554	/altid=gi 6226943	/def=sp Q90632 MOT3_CHICK ...	188	4e-46

EST:

CRA Number	gi Number	Score	Expect
CRA 76000044050113	gi 14568965	1265 bits (638)	0.0
CRA 1000600799987	gi 6359768	1170 bits (590)	0.0
CRA 160000129712648	gi 13709362	1063 bits (536)	0.0
CRA 580000099006260	gi 12788094	1049 bits (529)	0.0
CRA 32000087643803	gi 10813242	1017 bits (513)	0.0
CRA 157000141043600	gi 13460082	973 bits (491)	0.0
CRA 160000129843301	gi 13720697	902 bits (455)	0.0
CRA 105000016327758	gi 11084182	680 bits (343)	0.0
CRA 330000005235303	gi 6989741	551 bits (278)	1e-154
CRA 3000001439560	gi 1166011	547 bits (276)	1e-153
CRA 1000684940123	gi 6569405	486 bits (245)	1e-134
CRA 1000610791502	gi 5933739	486 bits (245)	1e-134
CRA 3000001441088	gi 1164256	462 bits (233)	1e-127
CRA 160000129872523	gi 13723263	410 bits (207)	1e-112
CRA 162000043366421	gi 10877364	234 bits (118)	8e-59
CRA 3000000874607	gi 2994619	218 bits (110)	5e-54
CRA 225000013398008	gi 18086759	208 bits (105)	4e-51

EXPRESSION INFORMATION FOR MODULATORY USE:**Library source:**

gi Number	Organ	Tissue Type
gi 14568965	lung	small cell carcinoma
gi 6359768	(none)	liver
gi 13709362	(none)	(none)
gi 12788094	brain	neuroblastoma cells
gi 10813242	(none)	pooled germ cell tumors
gi 13460082	prostate	adenocarcinoma
gi 13720697	(none)	(none)
gi 11084182	ovary	fibrotheoma
gi 6989741	(none)	(none)
gi 1166011	placenta	(none)
gi 6569405	(none)	pooled germ cell tumors
gi 5933739	thymus, pooled	(none)
gi 1164256	placenta	(none)
gi 13723263	(none)	(none)
gi 10877364	colon	(none)
gi 2994619	pooled	(none)
gi 18086759	Pancreas	Islets of Langerhans

FIGURE 1B

10/506513

1 MVLSQEEPDS ARGTSEAQPL GPAPTAQAPP PGPGPSDSPE AAEVKVEEL
 51 AGPATAEPIHE PPEPPPEGGNG WLVMIAAMWC NGSVFGIQNA CGVLFVSMLE
 101 TPGSKDDDKM VPKTAAWGS LSMGMIFGCC PIVSVFTDLF GCRKTAWGA
 151 AVGFWGLMSS SFVSSIEPLY LTYGIIIFACG CSFAYQPSLV ILGHYFKKRL
 201 GLVNGIVTAG SSVFTILLPL LLRVLIDSGV LFYTURLVLCI PMFVLFLAGF
 251 TYRPLATSTK DKESGGGSS LFSRKKFSPP KKIFNFAIRK VTAYAWAVG
 301 IPLALPGYFV PWVHLMKHVN ERFQDEKNE VLWMCIGVTS GVRLLFGRI
 351 ADYVPGVKKV YLQMLSPFFI GLMSMMIPLC SIFGALIAVC LIMGLFDGCF
 401 ISIMAPIAFE LVGAQDVSQA IGFLLGPMSI PMTVGPIAG LLRDKLGSYD
 451 VAFYLAGVPP LIGGAVLOFI PWIHSKKQRE ISKTTGKEM EKMLENQNSL
 501 LSSSSGMFKK ESDSII (SEQ ID NO: 2)

FEATURES:

Functional domains and key regions:

PDOC00001 PS00001 ASN_GLYCOOSYLATION

N-glycosylation site

81-84 NGSV

PDOC00002 PS00002 GLYCOSAMINOGLYCAN

Glycosaminoglycan attachment site

340-343 SGVG

PDOC00004 PS00004 CAMP_PHOSPHO_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site

Number of matches: 2

1	275-278	KKFS
2	509-512	KKES

PDOC00005 PS00005 PKC_PHOSPHO_SITE

Protein kinase C phosphorylation site

Number of matches: 7

1	10-12	SAR
2	234-236	TLR
3	251-253	TYR
4	258-260	STK
5	273-275	SRK
6	475-477	SKK
7	485-487	TGK

PDOC00006 PS00006 CK2_PHOSPHO_SITE

Casein kinase II phosphorylation site

Number of matches: 6

1	4-7	SQEE
2	97-100	SMLE
3	104-107	SKDD
4	164-167	SSIE
5	258-261	STKD
6	485-488	TGKE

PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 15

1	13-18	GTSEAQ
2	82-87	GSVFGI
3	141-146	GORKTA
4	149-154	GAAGVF
5	156-161	GLMSSS
6	174-179	GLIFAC
7	180-185	GCSFAY
8	201-206	GLVNGI
9	230-235	GLFYTL
10	265-270	GGSGSS
11	300-305	GIPLAL
12	337-342	GVTSGV
13	384-389	GALIAV
14	394-399	GLFDGC
15	464-469	GAVLCF

FIGURE 2A

10/506513

P00C00013 PS00013 PROKAR_LIPOPROTEIN
 Prokaryotic membrane lipoprotein lipid attachment site
 169-179 LLYTYGIIIFAC

P00C00029 PS00029 LEUCINE_ZIPPER
 Leucine zipper pattern
 365-386 LSFFFIQLMSMMIPLCSIFGAL

P00C00240 PS00267 TACHYKININ
 Tachykinin family signature
 Number of matches: 2
 1 154-158 FVGLM
 2 369-373 FIGLM

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	67	87	1.683	Certain
2	117	137	2.220	Certain
3	146	166	1.923	Certain
4	169	189	1.494	Certain
5	202	222	1.761	Certain
6	232	252	1.893	Certain
7	291	311	1.874	Certain
8	330	350	0.801	Putative
9	364	384	2.458	Certain
10	387	407	1.707	Certain
11	419	439	1.966	Certain
12	453	473	1.826	Certain

BLAST Alignment to Top Hit:

>CRA|62000057354769 /altid=gi|14090278 /def=dbj|BAB55595.1| (AB047324)
 TAT1 [Rattus norvegicus] /org=Rattus norvegicus
 /taxon=10116 /div=ROD /dataset=nraa /length=514
 Length = 514

Score = 874 bits (2233), Expect = 0.0
 Identities = 435/517 (84%), Positives = 463/517 (89%), Gaps = 1/517 (0%)
 Frame = +1

Query: 232 MVLSQEEDSA-RGTSEAQPLGPAPTGAAAPPGPGPSPDSPEAAVEKVEVELAGPATAEPH 408
 MV S EEP +A R T+EAQP GPAP+ AP P PGPSD + +VEKVEEL +
 Sbjct: 1 MVPSLEEPAAAERETNEAQPPGPAPSDDAPLPVPGPSPVSDGSVEKVEELT--RSTGNQ 58

Query: 409 EPPEPPIEGGNGMLVMLAAMWCNGSVFGIQNAAGVLFVSMLETRGSKDDDKMVKTAAWG 588
 EPPEPPIEGGNGMLVMLAAMWCNGSVFGIQNA GVLFVSMLETRG+KDD M FK AAWG
 Sbjct: 59 EPPEPPIEGGNGMLVMLAAMWCNGSVFGIQNAAGVLFVSMLETRGAKDDDNMAFK-AAWG 117

Query: 589 SLSMGMIIFCCPIVSVFTDLFGCRKTAWGAAVGFVGLMSSSFVSSIEPLYLTYGIIFAC 768
 SLSMGMIIFCCPIVSVFTD+FGCR+TAV+GAAVGFVGLMSSSFVSSIEPLY TYGH+FAC
 Sbjct: 118 SLSMGMIIFCCPIVSVFTDMFGCRRTAVLGAAVGFVGLMSSSFVSSIEPLYFTYGVWFAC 177

Query: 769 GCSFAYQPSLVLGHYFKKRLGLVNGIVTAGSSVFTILLPLLLRMLIDSVGLFYTLRVLC 948
 GCSFAYQPSLVLGHYFKKRLGLVNGIVTAGSSVFTILLPLLL L +VGL YTLP+LC
 Sbjct: 178 GCSFAYQPSLVLGHYFKKRLGLVNGIVTAGSSVFTILLPLLLGNLTSTVGLCYTLRLIC 237

Query: 949 IRMFVLFLAGFTYRPLATSTKDKESGGSGSSLFSRKKFSPPKKIFNFAIRKVTAyaw 1128
 IRMFVLFLAGFTYRPL S+K+KES S SS FSR-K SPKKKIFNFA+FK TAYAWA
 Sbjct: 238 IRMFVLFLAGFTYRPLVPSKEKESEDSSRRKLSPPKKIFNFAFLKETAYAWAA 297

Query: 1129 GIPLALRGYFVPVWHLMKHMNERFQDEKNKEWLMCIGVTSGVRLLFGRIADYVPGVKK 1308
 GIPLALRGYFVPVWHLM HV ERF+D NKEV+ MCIGVTSGVRLLFGRIADY+PGVKK
 Sbjct: 298 GIPLALRGYFVPVWHLMHMKERFKDNKKEWLMCIGVTSGVRLLFGRIADYLPGVKK 357

Query: 1309 VYLQVLSSFFIQLMSMMIPLCSIPGALIAVCLIMGLFDGCFISIMAPIAFELVGAQDVVSQ 1488
 VYLQVLSSFFIQL SMMIPLCS+FGALIA+CLIMGLFDGCFISIMAPIAFELVG QD SQ

FIGURE 2B

Sbjct: 358 VYLQVLSFFFIGLTSMMIPLCSVFGALTAICLIMGLFDGCFISIMAPIAFLVGPQDASQ 417

Query: 1489 AIGFLLGAMSIPMTVGPPPIAGLLRDKLGSYDVAFYLAGVPLIGGAVLCFCIPWIHSKKQR 1668
AIGFLLGAMSIPMTVGPP+AGLL DKLGSYD+AFYLAG+PP IGGAVLC IPWIHSKKQR

Sbjct: 418 AIGFLLGAMSIPMTVGPPVAGLIHDKLGSYDLAFYLAGIPPFIGGAVLCLIPWIHSKKQR 477

Query: 1669 EISKTTGKEKMEKMLENQNSILLSSSSGMFRKESDSII 1779

EISK TG EKMEKML NQ+SLLSSSSG+FKKESDSII

Sbjct: 478 EISKNTGGEKMEKMLANQSSILLSSSSGIFKKESDSII 514 (SEQ ID NO : 4)

Hmmer search results (Pfam):

Model	Description	Score	E-value	N
PF00664	ABC transporter transmembrane region.	4.2	7.1	1
PF01027	Uncharacterized protein family	3.4	7.6	1
PF00083	Sugar (and other) transporter	2.0	7.4	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmmer-f	hmmer-t	score	E-value	
PF00083	1/1	11	50	..	184	223	2.0	7.4
PF01027	1/1	121	177	..	1	59	3.4	7.6
PF00664	1/1	165	232	..	1	76	4.2	7.1

FIGURE 2C

10/506513

1 AATGGTATT TTGTAGACTG TCTTGATTG GGATTTGTCT AATGTTTTC
 51 TGATGGTAG CCAGGGATTA TGGGTTTGG CAGGAAGACC ACAGAGGTAA
 101 AGTACCATTT TCATCACATC ATATCGGGG TACATTATCA TCTAGTTGAG
 151 GTACTGTG CCACTTTTG CACCTAAAG TTATTTCTTC CCCCCACTCC
 201 CCCTTCCAT CCTATACTCT TTGGAAGAAA GTTACTAGGC ATACCCACAC
 251 TTAAAGAGTA AACCATTGTA CTTCACCTCC ATGAGGGAGG GAGTATGTT
 301 ATAAAGTATT TACATTTCT GCAGGAGAGA TTTGCTATT CTCTCCCTCAT
 351 TATTATTTA ATCATTTACT TACATCGTA CTGACTCGTG GATAATTCTT
 401 ACATATGTG TTGTTTGTG GCATGCAAAT ATATAATCGA TGTGCTTCT
 451 TTGCCAATA ATATGTTGTG GACAACCTTC AAAGTCATA ATAACAGATG
 501 ACCTTCAGAA CTTTAGAGG TTTAAAGTA AGTATCTAT CAGTCCTCTA
 551 CCAATGTACA TTATACCTCC AAATTTCTT TATTCACAC AATACTGGGG
 601 TATCATCTTC ATACATACAT TTTTGTGCAC TTATGTGCCT ATTCCCTTGT
 651 TTACTATTT ACCCTCATTT CTAAGGCCA TTACACTTG A GTATGTTCC
 701 CCATTCCACA ACCAAGCAGG GCTTGCTTC CTTAGTTAT GCTATTTCT
 751 CTACCTGGAA TGCTCTTTTC CTGCTTGTAC CCACTGAAGT CGTATGTTAG
 801 AATCAGGGCT TGGCCAAAG GCTGTTTGTG GTAGAGGCTC TTCTACAGTG
 851 TTGGAGAGA ATTTAAGGG CTTATCTCATC TCTCTCTT GTACATGTAT
 901 TATAACACAT CATCTGAGCC TCCCTAGTCTC TCCAGGACT CTTTTCTC
 951 ACCAGTTAT CAACGTATAA GAGGCAGAAA CGAGATCAAT CGCACTCATC
 1001 TGTGTACTCT ATCACAGTGG TGGGCACATC AAGTAACAGT CATATTTGA
 1051 CTTTGATTGA AGTGAAGAAAT AGGAATAACA GAAATTAAGA AGCATCCTCA
 1101 ATATTGCATA GCAGGTTACT CTTCTTTCTT TTACATAGG ATGGCACTCC
 1151 ATGCTTCAGG GAGACAGAGG AGTTGAATAC AGGTTTTAGT TTTGTTAA
 1201 AGTAAAAACG ACTCTGATGT AGTTGAAAAG TAATGCTTTC TAGCTGCTTG
 1251 TAAAAAAATGT TTGTTGGTG AAGACTTGGG AATTGCACTG CAGTGAGGAC
 1301 TGAAAATAG CATTCTGGT GTGCCAATAA TTCTATAAGA AATTGATAAC
 1351 GAATGCAAGA GAATGGAAGT AAAGTAATAA AATAAGGGCT CTGATCCTTC
 1401 AGATGACTTA TTAAAGAACG CAGGTGGCAT AACGAATCTT ACATATTATA
 1451 ATTAGTACTG AGAGGTGAAT GCCAAAACAT AAAACAAACA CAATCGAGAC
 1501 AATGTTAGTG TGACTGTGAC GCTGTTGCGG TGAGTTGAGG CTAACGATCC
 1551 AGTGTGGCTC TCTGAAAGG CCAACGGGCC CGCACCTAGG AGACGGGCC
 1601 CTTCTGCTCA TGCTTTGAGG CGGGGTGACCC CACACATCTG TGCCCCCTCTC
 1651 TGAGCAGGAG GAGGCCCCGT CGCAGACGGG CGCGCAGACA CGTCTGCG
 1701 CGGGCACCTG GGGGGGGCG CGGGGGGGCG CCCCGCCTCC GCTCTCGAG
 1751 GCGCAATCAT CTGGAGGCTG TGGGGGGCACG TCCCGCTCCC GGCCACCGG
 1801 CCAGCCGGCG GGGGGGGGG TGCTTTTAAG AACCGGGCGGC TGGCAGTGGG
 1851 CTCAGTCGGG GTGTCGGGGC TGTGACTCTAG AGGCTTCAGT GTGATCCCC
 1901 GAGGTGTTCG OGGOGOCAG CTGTCCTCGC GGGCGCCTGC CGCTGCG
 1951 CCTGGGGCGT GCGAGCCCCC CGGCCCCGCC GGGGCTCCGC CGCCCTCGGC
 2001 TCGGCCTCGT TAGCCCCCA GGAGCCCCGC AGCTCTCGGC GGAGCCCCGC
 2051 GGTAACTCGC GTCCCCCTCGG CTTCCTCGGC GCCTGAGGGG CGCGCTCGG
 2101 GCGATGGTGC TCTCCCCAGG GGAGCCCCGAC TCGCGCGGGG GCACGAGCGA
 2151 GGGCAGCGG CTGGGCCCCG CGCCCAAGGG GGGCGCTCCCG CGGGCCCCGCC
 2201 CGGGACCCCTC GGACAGCCCC GAGGCGGCTG TCGAGAAGGT GGAGGTGGAG
 2251 CTGGCGGGGC CGGGCGAGCCCC GGAGCCCCCAT GAGGCCCCCGG AACCCCCCGA
 2301 GGGCGGCTGG GGCTGGCTGG TGATGCTGGC GGCGATGTGG TGCAACGGGT
 2351 CGGTGTTCGG CATCGAAC GCTTGGGGG TGCTCTTGTG GTCCATGCTG
 2401 GAAACCTTGTG GCTCCAAAGA CGATGACAAG ATGGCTTTA AGACAGGTGA
 2451 GGGCGGGCGC CGGCCCCAGGC CAGCCTGGGC GACCCGGGTG GGGCCCCCGA
 2501 GCGCATCCCCG CGTGTGGGCT GTGCTGCTC CGAGTGTGC ATGTCGGTGG
 2551 GTCCCTGTGC CAGAGGGTGC GAGCAGGGGG GTCTTGTGAG TTGCAACAG
 2601 AGCTGCGGC TTCTGGGGCC TCGGGGTGCC CGTCTTTATA TGGAAATCCAG
 2651 CTGAGAGCT GTGTGTTTGC AAGCAGGTG CAGAACCTAC TTGCGCGAGAT
 2701 CGTCTCTCTT TCCCCCTCAGC AGAGCAGACG CTAACAGTCC ACAGGAGGCC
 2751 TTCTTTTAT TTGTTGAAA CAAACAGAAC CCCAGAACCT TCAACCCCCAG
 2801 TCATCGCCCT GTCTTTTGT TGGCTCTTT CGTACTATG CCAGTTATGT
 2851 AGTTCTCAC CTGCTCTCCCT GGGCCCCAGA GGGGTGTGGC TATGTTGGGG
 2901 GGGCGGGGGG TGGAGTTTGG AGGAATGAAA GAGATTGTA CGAAGGTCA
 2951 TGGAGTTCCA AAGGGGGGCC TGCAAGAGTC ACGGTTCCCGT CGGTTCCCCGT
 3001 CCCCCCGCT TTTTTGCC TCTGGGTTAA ATGTAGAAAA CACGGGAGGC
 3051 AGCCGGATTA GGGACTAGGA TGAGGAAGGT GAAGGGTTGC TTCTTCCCCCTC
 3101 TTCTGTGTTG TTGTTTGTAC ATTTTTTTTAAACATATAG TAAATTAGAT
 3151 ACAAAAGGTG CAGATTCAAGC GTTTCTCCG TGAGAGCAT TATTATGACT
 3201 TTGGCTGG TTAGGCAAA AACAAATCTA AGACCTCTG CATGACACTT
 3251 TAACATAAAAT TCTTTCACCT TATCCCTGAA GGTGAGCGCG GTCAACCCCCA
 3301 TTGGGTGAG AAAACTGTAG CTCACTGAAA GTGCTTGGT GGGTAGTAGA
 3351 ATGGCAATAA AACACATATC AACTGACTTC AAGGGCTAAG TGATTTCCAT

FIGURE 3-1

3401 TACTAAATCA ACCTCCCTCC CCATCATTG GGGTAACTTT ATATGATTAA
 3451 TAGTCCTTTT TTTCACCTT GATTTCTAT TATTTTACA GTGAATATT
 3501 CTTAGGCCTT TAGTATGCAT ATGAGGAATG GGCAGACTG TAATAAATT
 3551 TGAGACAAAG GTAATGCTGG GTTATGCTGA GAGTTTAAA ACCTGACATA
 3601 AATACTATTA AACTATTGTG ATCATTCTGC AACTACTTT TCTTCCATT
 3651 CGCATCATGT TTGTGACTTA TCCACATAAT ACCTCAGTGT GAACGTATA
 3701 CTCAAATCTT TTCCATTATA ACTTAGGTGG TTTCGATTGT TTGACTATAT
 3751 TATACTCTAT GCATTCCTCC TCTGATGGC ATTGAGTTG CTTCCAAACT
 3801 CATTCTAACAC AATGCTGCAA TGAATATTCT TGACACTCT CGTTATGCAT
 3851 GTGAATACCG TACCATTTA ACCTGGAATT TCTGTTCTT AAATAGCTAT
 3901 TGAAACTGCT GTGGTATGCC GGTCAATGGG CTAGGTACAA AAAGTGTAA
 3951 AAATGTAGTA ACATATCCTT ACCATTTAAG GGAAGTAATC ATTGTAAAGT
 4001 TTAGCAGGGG AGATATGCAT ATATAATAGC AAACAAAAAT AGTTTGTTGT
 4051 CTTTCTATA TGAGTATTGG GTGTCAAGAGA GAAAAGCCCC AAAAGAAGGC
 4101 AGAATTGACA GAGTTAACAT TTAAAGACTA GTTCCAACAT TTACCATATT
 4151 CCTGCCCTGGG ATTACAGATT TTTCATTGCA GTCAAGATAA CAGCAGTCTT
 4201 TTGTTTATCA TTGTTTTGCA AAATTCACTT AAGTAGATCC TTTGGTGTCT
 4251 GTGGGTGGGT TTTTTTTTTT TTTTTTTTTT TTTTTTTGAG
 4301 AGAGAGAGAG AGCAATTGCC AGAGAGACCA TAGCTTGCAG AGGGATGAGA
 4351 ATTTGCACT GTCAAAGTCT CTACCTACTA CTTGCCCCA AAGTTCTAAT
 4401 TGGTACACA ATATCCCAAT ACTGGTAGC TGAGAGTGAG GGAAGGAACC
 4451 TGGTTTTCTT TTGCACTCT GTGGAACCTT GTGTTTCCA TTTTGATGAA
 4501 TATTTTTCTT CTTTTACTC AGTTCACTCT TTGACAACCTT TTTCAGTCAT
 4551 GTTTGTGAT GTGTGGGTAT ATATCATATA AACAGTGCA CAGGTGTGCT
 4601 AGTAAATGTC TTGAAAGATCT TTGTTTTCTT CTGCTGACT GCTGTATATC
 4651 TATTTATGGT TGTGCCATTG CACAAGGGTG COCAACTCAG GGGTAAGTGG
 4701 GGACTGAAAA CCAGGCTGGG CTCTGGTGC CTTTGTCTG ATTCTACAG
 4751 AAGGGCCCTA TGCACTTGTA ATGGCCCTGT ATAACACAGC ATCTAGATTG
 4801 AACAAATGCC ATTACTGGG TGCTAGGTA TACATATATG ACTGATAGAT
 4851 GTTAAGGGCT GAGGAAGAAA ACAGATTAA ACTTAGTGT GAAAAAAATGG
 4901 TTAAAGATA GTCTTTAACG CAGTTATTGT TGAGATCTCT CTCTCTTCCC
 4951 CTGTCCTCTA CCCCTTCTC TTTCCTTCAG TGCAACACACA CACACACAAA
 5001 GGTGTTTCA AGAGTCCCCTC ATCTACACCA GTCACTGTT TTTGAGAATA
 5051 TCTGCTTGA AGTTGATTG GTCAACACTT TTCACATTG TATTGGAATG
 5101 CTGAGTCGTC TGTGATCAAG CATATGCAAG CTTCAAATAC ATGCCAAAAAA
 5151 ATATCTGGAA TTGTTTAAAG CCTTTTATTG TTCAAAAGTTT TGGTCTATTT
 5201 TCTATTACCG TACTCATGAT GGATAATCC GTGTTAGAG TACAGCTAGT
 5251 TCTGCTCTT TGTTTCCATT ACTCTTTAT AGCAAGTGAC TAGCCTAAGG
 5301 ATATACAGGG AGGTGGTGGT GGAATGGAAT CTAGGCTCC AAATGATGGT
 5351 GGGCATTCT TGAGTACTTT CCTGTTGCTA AGCACTTTAG ATGCGTTCC
 5401 ATTTAAACCT TACCACTGG CTCTGATAGA CTTTGTAAAT ATCTTTCTT
 5451 TCAGATATGG GAACTCAGGC TTACAGAGT TAAGTAAGAA GTGGAGCCAG
 5501 AATTCAACCC CAGGCTTATC TGACTCTAAG AGCTGGATT TTATTTAA
 5551 TTATTTATTT ATTAAAATA TGGAATGCTT CATGAATTG CATGTCATCC
 5601 TTGTTTCAAGGG GTCACTCTAA TCTTCTCTGT GTCATCCAA TTTTAGTGA
 5651 TTGTTGTTCA AAGTGCTGCT GAAGCAAGCA CCAGGAGCTG GGTTTAAATC
 5701 ATTCACTATA TTGCAATTGAC TAGATAACAT TCTGCAAATA CGATGTTTT
 5751 TATGTTGTTG ATTAATTAA GTGTTAGTGA TTGGTTGAGT GCTCTACCAT
 5801 GCATTCTGGG ATTAGAAAGA AGGGTCCCTG TTCTTGGTC CTACTTTGTG
 5851 GTGAAATAAAC ATTGCAAAT TATTAATGTC TCAAACATA TTTCTGAAGT
 5901 GTAGAGAGAC TTCCATAGAA GAACAAGATA CTTCCATATG CGGTCAAGC
 5951 AAAAGCTCTGG GTTTCTTCTT GAAGAACCTT TAGATTGATC CACAGCAGGA
 6001 CAATTTCT AGGGAGAACT GAGGAGGAGC CTTCTTAGG CTCACTCTC
 6051 TTCAGGGCTC TGTTAACTCT TCCACCGAA TGGATAATCT ACCCAAAATT
 6101 TCTCAGGAAA GGGCTGAAG AAGTCATTG ACACTAAGGT GTAAAGTGAGT
 6151 TTACACATCT TACTGTTAAAT TCTCTTATA CAAATGTTA CCAAGTTATC
 6201 TAACACGCTT TGTTTGGG TCTGCTCTGG GGACTGGAGA TAATGACTGA
 6251 GAGAGAAAAT GTCACTGTT TCAAAGTAGC TTAGGATCTG TTGTTGGGATA
 6301 CAAATTAAATA ACAGACCCAGA AGTAATAGAA TATTTCCCTG AAGGATTTTC
 6351 AATATAACAG GACTCAGTTT TACTATAAAA GGCTGAAATT CTAAGGTCT
 6401 TTCAACAGGT GGTGGGGTGG GGGGTGGGAGA AGGCATTGAG CCGCTCTTTC
 6451 TCTATGGTTA TAAATCTCAC TTGGTGAAT TAAGACTTTG GAAAGGGGAA
 6501 GTAAAGCCAC TCCAAGTTGG GCAGTAGAAC CAATGAAAAA TGCTGACGGC
 6551 ATCACAGTCC CATTATGGTG CCCAGCTGCC AATGACATGG CACTCAGAGG
 6601 AGTGTCTCAC ACATACTGCT CTGCTGAGG GAGCAAGCTA AGCTTGAGTT
 6651 GTCTCTTTT TTGTTGTTT TTTTTTTTTT TTTTTTGA GACAGATTCT
 6701 CACTCTGTCG CCCAGGTGG AGTGCAGTGG CACCATCTCG GCTCACTGCA
 6751 ACCACTGCTT CCAGGATGCA AGCAATTCTG CCTCAGCCCTT CCGAGTAGCT

FIGURE 3-2

6801 GGACTACCTG CGCTTGACAC CACACCTGGC TAATTTTGT ATTTTTAGTA
 6851 GAGACAGGGT TTCAACCATA TGGCCAGGCT GGCTCTAAAC TCCTGACCTC
 6901 GTGATCCACC TGCTCGGCT TCCCCAAAGTG CTGGGATTAC AGGCATAAGC
 6951 CACCGGGCCT GGCAAGTTG TCTCTTTTA GTTGAATTTC TACCTGTTCA
 7001 CATGTGATT CCTCTTGCC AGGTAGAGAG GAATCAGACA CTCTGGGAA
 7051 GAATACAAAG AAATACAATT AAGTGGAAACA TTGTTTTCT TTAGAAAGTG
 7101 CAATTTGGG CTGGGGCAG TGGCTCATGC CTGTAATCCC AGCCCTTTGG
 7151 GAGGCCAAGG CAGGTGGATC ACCTGAGGTC AGGAGTTGA GACCAGGCTG
 7201 GCCAAGATGG TGAAACCCCG TTTCTACTAA AAATACAAAAA AATTAGCTGG
 7251 GCATGGTGGC GGATGGTGT AATCCCAGCT ATTGGGGAGG CTGAGGCAGG
 7301 AGAATTGCTT GAACCTGGG GGCAGAGGT GTAGTGAGCC AAGATGGGCG
 7351 CACTGTAETC CAGCATGGC AACAAAGAGTG AAACCTCGTC TCAAAAAAAA
 7401 AAAAAAGAAA AGAAAAAAAG AAAAAAGAAA GAGCAACTTT GTTTTAACTC
 7451 TGCTAGATAC TGGAAAAACCC ATGGAACCAA TGAAGAGCCT AGGGCTTTT
 7501 ATTTGTTTG AGATTGTGCC ATTTCACTCC AGCCTGGCA ACAAGAGAGA
 7551 AACTTTGCT CACACACAAA AAAAGTGAA ATCAAACAT TAAAATTAA
 7601 GTAGTTTGGG AGTAGATTAT CAAAAGGTC CTGAAAGGGG GTTCTTTGG
 7651 CTATAATCTT TAACCAACT CTACACTCCC TGATGGAGA CAGATTTCTT
 7701 TTAGATGGT TACAGTCACA AAGTAGGGTT TTCAGTAGCA TTAGGGATG
 7751 AATGAATCTT GCAGCACTC TCCATGTATC TTGCTAGCCC CTCTGAAACT
 7801 TCAGGTCAGT TAGTGCCTCC TCAGAAAATTG TTCCCCCCAC ACCAAGTTT
 7851 CACATTTACA GTTATACTGA TATCCACATT GTACTGTTG ATGTGACACC
 7901 TAGATTATAG GAAATTTGG CTATAGTCA GAAATTAACG GCTATGTTT
 7951 GCCTTACGC TAAAGAGATT TTGTTTGT TAGTAGGAA AGCGGCCTGC
 8001 ATAACTAGCC ATTTCTGTAT CTTAGAAAAA TTGTTAGTAA CAGTCTTTG
 8051 TTGAGCTAGT TACAGTGAAC AAATAATCTG GTTCATGGTC CTATACATCT
 8101 TTCACTATAA GAAAATACC TGATTGTTAT TTACACTGGA AGAGAGGTAG
 8151 AAAAGCTAACG AGAACTCACT TATGGCAATA AACCAATCTA AACTACCTGC
 8201 TAAAAAATAGT GAGAGATT TAAAAATGGT TCTAGGATTG TGGAATAATA
 8251 GTGAGTATGG TATGGGGTTC TCATACTTCA TTTCAGAAAT GTTCTGGAT
 8301 TAAGTGCAG ACTGAATAGC ATATATACTG AATTCTAATT AAATACAACA
 8351 ATGTGAGATT CCTGTTGGTGT TTTCATGG AATTAAAAAT TAATAATTTC
 8401 AATAAAATTA ACTGCTGAAA GAACCCAATT AGCCAAAATG AAAAGCATAA
 8451 CACATTTTT CAGGAGCGAT TTGAGGTGT CTTTAGAAT AAATTGTACT
 8501 CTGCTTTTGA TTGATTTCG TACATCTTT TTGTCAGTT CCTTGAGGCT
 8551 CAGCCCCCTGG CCATACACTT GCTTCACTTT TCCCTCTTTC TTCCATCCAC
 8601 TGTCTGGGGT CTGTATTTCA CAAATCTCAT CACTGTGTC AAGACTTATT
 8651 TACTATTCTT GGACAGTCC ATTGGGTAC ACAGGTACAT CATACTAAAC
 8701 TAACATGAAC TCATTTTCA GCTACACCAT ACAACCTTCC TTACTACCA
 8751 AAAATGACAG CCCATTGTC GGCATTCTTC TGAATCCATA TTCCCTCCCTC
 8801 TTAATTCTCT GTGATGATA CCTCTGGTTG TTAAAGTCAG AAACCTGGAA
 8851 TGTATCTTAG CCTCTTATTT CTCTTOCTTC CTAACTGTG TTGTTAAATC
 8901 AGAGTTCTT TTGTTTACCC TTCTTAATGC CTCATAAAATC AGTCCCCACTT
 8951 TTCTTTCACT ACTGTGCTT AATTCTATGCC TTCACTTACT TTGTTTTTTA
 9001 TTGTTGGGA TAGGGCCTCA CTGTGTTCCC CAGGCTGGAG TGAGTGGCA
 9051 TGATCATAGC TCACTGCACT CTCAAACTTC TAAGCTCAAG CAATCTCTC
 9101 ATCTCAGCTT TTGAGTAGC TGCAACACCA GGCACTGCC ACCATGGGCG
 9151 GCTAATTAAA AAAATTTT ATGTGGAGAT GGCATCTTC TATTTGCTC
 9201 AGCCTTGTCT TGAACCTCTG GCCTCAAGCG ACCCTCTTC CTCAACTTCC
 9251 CAAAGTGTG GGAACACAGG CGGGACCTAC TGTGCTGG CACCTTCATT
 9301 ACTATTGGCA ACAATTAGTC ATAACCCCTT AACAGGATTG TTGCTCTCA
 9351 GTTGACATC TGAGTGTATT TTCTAAAAGA TTGGACCATA TGATTTTCT
 9401 GTTTAAATGC CGAATGACAC TCATTAACCTT TAGGAAAATG TCAAAACTCCC
 9451 TACTCCGAAG GCGTCAAGC TCTGGCCCTT GCCTGGCCCT CTAGCCCTTGC
 9501 CCCTGCTTCT CTCCCTACT GGTCTTGTG TTCTAGCCAA CCTGTAGGTG
 9551 TTACATGGC CCAAATTGTT TTGCTGCTT TTGCTCTCTG TACCTTTGTG
 9601 TGTGCCACTC CTGTCTTCAG TGCGATGGTT GGTCTTGTG AGATTCTGAT
 9651 GAAATGGTTG GCCATTCTAT TCCTATGTCA CAATCTGGG ACACAAACAG
 9701 TGATTITATG CAATTGTATG GTATTTGATG CACTTGAAT ATTGGGGTA
 9751 GCTACATTTC GGAGTTTGA GAACGAATTG AAATAAGTTA CAAATTATGT
 9801 TTAAAGTGGT AGACAGAGAA CCTGATTICA ACCTATTCTA ATAAAGCATT
 9851 CGGTGAAAGC CATTAAAG ATGATCCATA TTGTTAAAG TGTAATTTT
 9901 TATATTCTCT GATATGGTTT GGCTGTGTC CCACCCAAAT CTCACTCTGA
 9951 ATTGTAGCTC CCATAATCCA CACTTGTCACTT GGGAGGGAGG TAATTACCTG
 10001 GTGGGAGGTA ATTGAATCAT GGGGGCAGGT TTCTCTGTGC TTGTTCTGTG
 10051 ATAGTTAATA AGTCTCATGA GATCTGATGG TTGTTAAAGG GCAGTTCCTC
 10101 TGCACACTTT CTGTGCTG TTGCGATGTA AGACATGCTT TTGCTCTCT
 10151 TTCAACCTTCC ACCATGATTG TGAGGCCTCC CTAGCCATGT GGAACGTGTA

FIGURE 3-3

10201 GTCCATTAAA CCTCTTTTTC TTTATAAATT ACCAGCCTC AGATATTTCT
 10251 TCATAACAGT ATGAAAATGG AGTAATACAT TCCATTACCA TAAAGAAAAG
 10301 GCTTTCATGT ACATTATTTT TTAGAGTAGC CTTGTGGTAT GTCTTACCT
 10351 CCATGGATAG ATAAGAAAAGT TGCAACTTGC ACAGTATTAG GATTGATATC
 10401 AGTATTACTT TTATTAAGT TGAACTTAAG AGCAGCTTTT TGGCTGGAAA
 10451 AAAGTTGTAC TTATGTCAA AAGTAAATC CTACTCCCTGT
 10501 CCCAGCCTG AAACATTATTT CTACATATT ACTTCCATGT TCTTTAGAAT
 10551 ATTCTCTCAA TAGTGTCTCC TACTCAAGTC ATCAGAAATG CTGTGATGTC
 10601 ATTTTTGAA AAGAATTCCA GAGTTATCAC CGCTCTGCTA GAAATCTGGT
 10651 CTTATATTCA AATTAAACAA GCAAAACCTTA ACAAAACAA GCTAAACCCCT
 10701 AAACATAACA TGAACAGTCA GCTCACCAACA GTTCTGAGCA CCTGCCCTGG
 10751 CCTGGTCCA CCCACCGCAGG GACTGTGGAT GTTTTTATTG GCAGAGATTG
 10801 AGAACAGGAA ACTCAGCAC ACCTGGGAAC TGCAGCAGACC CACCCACATAA
 10851 GACAGATAGC CTATCAGTGG CTGGAGGAAT GGAGGAAAGC AGTGCCTTCA
 10901 AATGTACATG CCAAATGTGT ATGATCATAC CTCTTTGTT AAGTGCCTTC
 10951 TTTAACAGCA AAAGTAAATTCTC CTCACCTTGC ATATAGGAAC TAAAAAAAG
 11001 TCGATGAAGA AATGGCTTGC CTTATTTTCA AGTAAGAAGT CTTTTTCTAT
 11051 TTCACTAATT TTTAATTATG GGCATAAGTA TGAAATACAG ATTAGAAATA
 11101 CTGAATGTGG ACCAAAGCAA TGTTTCTTT GTGGACCAAA GCAGTGAATC
 11151 TTTTTCTTT CTTCCTTCT TTTCCTTTT TTGTTAAGAG ACAGGGCTT
 11201 GCTCTCTTGC TCAGACTGGA GTGCAGTCAG TGATGTGATG GCTCACCATA
 11251 ACCTCAACCT CTTGGGCTCA AGGGATCCCTC CTGCCCCAAC CTCTGAAACA
 11301 GCTGGGATTA CAGGCACATA CCACCCACACC TGGCTAATT TTAAAGATTT
 11351 TTTTGTTGGG GAGGGTCTCT CTATATTGCC CAAGCTGGTT TCAAATGCCT
 11401 GACCTCAAGT GATCCTCCAA CCTCAGGCTC CCAGAGTGT GGGATTACAG
 11451 GTTTGAGCCA CTGTCGCTGG CCCAAAAACA GTGTTTGAA CTCCCCTTGT
 11501 CCCCTCTTGA TAACATAAAA AGTCTCATGG TACTTCAGAA TTTTGTGCA
 11551 CACATCCAAG TGAGTTTGC CTTTCTTGT GAGTGGCAGA AGACAATGTC
 11601 ATACTCTGTA TTATCCATC AGCCAAAATT TTGTCAGCT TTACTTTTAT
 11651 TTTTTAAATT TTATTTGTA TTTTTTTTG GAGACAGAGT CTGCTCTGT
 11701 CGCCCAAGGCT GGAGTGCAGT GGCGTGTACT CGGCTCACTG CAACCTCCGA
 11751 TGCCCTGGTT CAAGGGATTT TGGTGTCCA GCCTCCAGAG CAGCTGGGAC
 11801 TACAGGCACCG CACCCACCATG CCTGGCTAAT TTTTTGTAT TTTTAGTAGA
 11851 GGTAGGGTTT CCCCCATGTTG GTCAAGGTGG TCTCGAACTC CTAACTCTAG
 11901 GTGACOCACC CGCCCTAGTC TCCCAAAGTG CTGGGATTAC AGGCATGAGC
 11951 CACCATGCC GGGCAAGCTT TACTTTAGT TATGTTGTGG ATATAATTAG
 12001 AATTATTTTC TTGTTCTTA AATACAGAAT TATAAATTG AATGTGTGCT
 12051 TAAAAAAAT TAGAAAATGT ACCCCTCTAG AACTTCTGAT CTATGCCCT
 12101 TAGTGAGTGA GGGGAGCTGT GCGGCTTTCC TCCCTCAGTG CCTCCACTTA
 12151 AGAATCACTC ACTAAGGGAT TTAAATTCA ATTAAAGGTA TCCCTTAGAT
 12201 AGTTAAAGTCT AAATGAAAGG TCAATGATTA AATTAATGG AAAAAAGTCCA
 12251 TTGCACTTAC GAAAAGGTGC ATTGGCTCTAC AGTTCAGCTA GTACCTTATT
 12301 TTGCTAAAG ATTAAATTGCA AGCTGGGGGG GGTGGCTCAT ACCTGTAATC
 12351 CCAGCACTT GAAAACCTGA TGGAGGCCGG GTGCCGTGGC TCATGCCCTGT
 12401 AAATCTTAGC ACTTTGGAG GCGGAGGTGG GGGGATCACT TGAGGTGGGG
 12451 AGTTAGAGAC CAGGCTGACC AACATGGAGA AACCCCTGTCT CTACTAAAAA
 12501 TACTAAATTCA GCGGGGCTATG GTGGGGCATG CCTGTAATCT CAGCTACTGG
 12551 GGAAGCTGAG GTAGGAGAAT CGCTTGAACC CGCGAGTTGG AGGTTGCAAT
 12601 GAGCCAAGAT CATGCCATTG TACTCCAGCC TGGGCAACAA GAGTGAAGACT
 12651 CAGTCTAAA AAAAAAGAAA ACCCTAGGTG GAAGGATCGC TTGAGTCCAG
 12701 GAGTTCAAGA ACAGCCTGGG CAACATAGTG AGACCCCATC TCTACTTTA
 12751 ATTAAATAAATTAA AATTAACATT AAAAGTGTAA GTAAAATT TTAAAGAGT
 12801 AAATTGTATC AGCAGTGTTC TGCGCTGTGTT CAGAAAGCCA AAATTTTATAT
 12851 TTGTGTTTCA TTAGATTTGG ATCCAAGACC AATTTTGAGA TTGTTTTAA
 12901 TATTACAAAA ATAGAAAAGT ACCTGTTCTAT TAAATGGTGA TATTATTTGA
 12951 CTTTTCTGTG TAGATAAGTA TTAATGCCAA GTCAAGTAGG TTAGTGTGGA
 13001 GACTGTTTTT ATTAAATAAAA ACCTTTCTAT CTTAATTATC CTTTTTATT
 13051 GTTTTGACTT TATGTTGCAA CTTCAAAGCA GCATCTCAA GGGTTCACAT
 13101 TTGTCAGTGG TTGTTAAAC AACGACATTC CACAAAGTTA ATTGATGTTT
 13151 TAGTGTGAAT GGGGAGGAA GTTGTCTTGC TTGTCCTGTG GTAAACGTAGC
 13201 ACTCAAACCTT TGACAGGAGG ACCCCAGCCA TGTAGTTATT GACTGTAAGT
 13251 ACACCTCCCT TAAGAGTAAG TTGTTTTTA GGAATAAAATG ATAAATGTAT
 13301 GGAGTTTTAG TTGAGGTGT TATGTTTTGT CTCTTCTTTC TCAGAGAAAA
 13351 ATGTTACTGT GGAATAGGCT TAAACTGAAA AAAGGATCTG ATTTTTATA
 13401 AGATCAGATT CTTGGCCAT ATTGATGAT TGGTTCAAAA CAAATGTTA
 13451 ATATCAGATG CACAATGTTA AGAGCTCTAT AATGAGTGG TAACACCTGA
 13501 GCGTCAAGCCA GTGACTACAC ATTAAGTTCT TGTTCATT TTGCAAGGGC
 13551 AGGGAGCTG GTGAGGCATA AAGAAGGGTC AGAGGAGATA ATAGACTTAT

FIGURE 3-4

10/506513

13601 ATTTGTATTT TTATGCATAA TTATATAGGA AACATTAAAT CCAGAGTTGA
 13651 TAAATAATTT GTATGTATGT ATTTATTTAT TTGAGACT GGGTCTCGCT
 13701 CTGCTGCCA GGCTGAAGCG TAGGGTAG AACACAGCTC ACTGCAGCCT
 13751 TGACCTGGC TCAAGCGATT TTCTTGCTC AGCCTCCCGA GTAGCTGGGA
 13801 CCACAGGCAT GTGCCACTAC ACCTGGCTAA TTTTTAAAGT TTTTTGTAG
 13851 AGATGGGTC CTCACCGCTG GCCCAGGTTG GTCTGAACCT CCTGGGTCA
 13901 AGCATCCTC CTGCTTGCG CTCCCCAGAGT GTGGGATTA TAGATGTGAG
 13951 CCACCATGTT CAGCTGATAA ATAATTTCTA ATCTAAAAAT CCTATTTGT
 14001 ATGGAGAGGG GAGGGCAAT AGGCTATTTT TTCCACATTT TGTTGCTGGC
 14051 CAGAATCTCA GAGGGTTTT ACCTGCTTA AAAATGATTA AGGCTGGCA
 14101 GAATGGCTCA TGCCCTGTAAT CCCATCACTT TGGGAGGCTG AGGCAGATGA
 14151 ATTGCTTGAG CCCAGAAGTT CTAGAGCAGC CTGGGCAACA TGGTGAACC
 14201 CCATCTCTAC GAAAATGCA AAAATTAGCT GGACGTTGGTG GCAGGCACCT
 14251 GTAGTCCCAG CTACTCAAA GGCTGAGGTG GGAGGATCAC CTAGCTCTAG
 14301 AGGTCAAGGG TGCAATGAGC CAAGATTCT CCTACTGCCG CCAGCTGGG
 14351 CAGCAGAGCA AGACCCCTGTC TCAAAAAAAA AAAAAAAA GGTTATTTT
 14401 TTTCAGCATA GACAAGCAG GGGAGGGAA AGATTATGTT TCAAATGTT
 14451 ATTTAAACTA CTACATTTAA AGTAATACCT CCTAATGATT TAAACCTTAG
 14501 ATTAGCTCTAT TTATGGGTC CCTGGAAAGT CCTTTATAAA ACATGAGAGT
 14551 TTATTACTTTC TTTCATACA CGGGTGTCTG TAAATGATGC TCAATAGATC
 14601 TGAAGCTGAA ACTTTCTGAA GAAATGGTT GAAATTATCT ATGGATGTC
 14651 ACTTGAATT AAATAAAAAT AAATTGTAAT ACATTGGTT TTATGGTT
 14701 TGAATTGTA ATTATTTGGG GATTGGATT TGGTTTATCT ACAGTTGTC
 14751 TTTTTTTGAGTCTGCTGCA CCAGGCTGGA GTGAGTGGT
 14801 GGGATCTCGG CTCACTGCAA TCTCTGCTC CCGTGTACAA GGGATTCCTC
 14851 TGCTTCAGCT CCTCTGAGTAG CTAGGATTAC AGGCATGAC CCTCATCCCC
 14901 AGCTAATTAA TGTATTTTA GTAGAGATGG GGTTCACCA TGTTAGCCAG
 14951 GATGATCTCG ATATCTTGAC TTGCTGATCC GCCTGGCCT ACCAAAGTGC
 15001 TGTGATTACA GGTGTGAGCC ACCTGCCCCG GCCTACAGTT GTCTTTTTT
 15051 ACTCACTCCC ACAGATGAAT CATTATAAGG AGGTTAGCTT CCTTAAAGA
 15101 ATACACTCTC CTTAACCGGT TTATCAACA AAGCCAGGGA ATGCCAAACT
 15151 TTAACACTTT TAQCTAAATT TATAACTGT GCATGTATGC ATATATACT
 15201 ACATACATAC ATGTATATGT TGTATATAT GTATGGGTAT CATCAGTATA
 15251 GTCTATCAGT ATAGTAATTG TTATCTGAA ACTTTGGGTT CTCTCTGCT
 15301 CTTCCTCTCC CTCTCTCTCT CTCTCTCTCT CTCTATATAT
 15351 ATATATATAT ATATATATAA ATATATGTAT ATATATTTT TCTTTTTTG
 15401 AGACAGGATC TCATTCTGTC ACCCAGGCTG GAGTGCAGTG GTGGGATCAT
 15451 GGCTCACTGC AGCCTCGAACCTGGCTC TCTGGGCTC AAGTGATCCT CCTACCTCAA
 15501 CCTCCAAGT AGTTAGGACT ACAGGGGCAT GCGCTACAC GTAACTAATT
 15551 TTGTATTTT TTGTAGAGA CAGGGTTTG CCTTGTGCCCC CAGGCTGGTC
 15601 CTGAAATCCT TGGCTCAAGC AATCTGTC CCTCAGGCTC TGAAAGTGC
 15651 GGCATTACAG GTCTGAGCC CTGGCCCCAG CCTAGATTTT TTGAATTGT
 15701 AAAAAAGTAA CCTGCTCCCT ACTGAAGTAA ATAGAGTTAA AAAAAAGTAAT
 15751 CTGGTACAGA CACCTGTATT TTCTGACACC CCTAGAAGAG TCCCAGGTAC
 15801 CCTATAATCA AATACATTAA CATTCTGCA GCAAAATGTA TGGATAAGTG
 15851 AGTTAAATAG AGACCATGAG TAGCTTCAGG TCAAGTTTG
 15901 CCTCTAATTA AATGTGATA TTCTCTTACA AAAACTTTGG TTGTTGGTTT
 15951 TCAGATTGCA AAATAAATAA TTATAAAATAA TTATTTTTTG TGAGACAGAG
 16001 TCTTGTGTG TTGCTCAGGC TGGAGTGCCTA TGGCAGGATC ACGGCTCACT
 16051 GCAACCTCAA CCTCAGGCTG AAGCCATCT CCTACCTTCAG CCTCCAAGT
 16101 AGCTGGACT ACAGGAGTGT GCACACATGT CCTAGCTCATT TTGTATTTCT
 16151 TAGTAGAGAC AGGGTTGCG CGTGTGGCC AGGCTGGCT CAAACTCTG
 16201 GTCTCAAGTG ATCCCTCTGC TTGGCCCTTC CAAAGTGTG AGATTATAGG
 16251 TGTCAGCCAC TGGGCTGGC AGAATTATAC ATTTATATGT CAATATTG
 16301 TTGTGTTTC TGTTTCTGAG TAAACGTTTT TTAAGGTACA TTGTTCTGTA
 16351 TCTCTATAAGG CACCTGCTTA ATTGTTCTAG TAAAGTGTAT GTTCTACCAT
 16401 ATTGGCTAC CCTAGGTTAC TCAACCCAGGC CCTCTTGTGTT TAGTGAGTAG
 16451 CAGGAGTGT TGACAACAT ATGTAGCATA TCTGTATATG TCGTGAACA
 16501 AATTGTTTTT TTCCCTCTC TTGGATTGCT CCTTGGGTG TACGTCAGA
 16551 AGTGAGATTA CTGGTCAAA GGGTATGAAC AACTTTATAA CACCTGTTAC
 16601 ACATTGCCAG ATTATTCCTT AGAAAACCTG AACAGTTTA TTGTCGACC
 16651 AGTGATGTGC TGGCTCTG AAAACCCCTAC CAATGTTTGG TTTTATTTT
 16701 ATTGATTTT GCTAATTGTA TAAGTACTAA TGATATTTT TAAAGTAGT
 16751 TTAAAATCAT ATTTCAGTGC TTATAAGTCT GTGTTCCAG TTTTGAGCC
 16801 CCTTAAAGC TGCAATGAC TTGGCAATTA TATATAATAT TTGAAAATAC
 16851 AAGAGGACAT ATGCCAGTGA ATATATTAGA GTAAAACCTC ATCCCTAG
 16901 GTAATGAAGG AATGCTTGAG ATTATCTTAG GCCTAGATT CTCACTGAC
 16951 ACATCTGGC AGGTAGACCA TGTCTTGTG TCTCTGCTG TCTTAGCCCC

FIGURE 3-5

10/506513

17001 GGTGTTGATC AAGGTCTGTC TTAGGGCGGG GGATAGGAAT GGAAATAAAC
 17051 CATGTAGAGA CTTGGGCATG AGGACTTGT GATTCTCCA GGTGACATCT
 17101 CATCCTTCAG AGGATCAAGT CTGCAAGAGT AGCCATATCT TAATCTCTT
 17151 CAGTGCTATC ACCTTGCATC AACCTCTGGA CTGGAGCTAA TCCCGTTGAA
 17201 AATATTTAT TAATTAATTG TGGGGTATGT TAAAAATTGT GTTGTGATGT
 17251 ATTTATTTAG TATTTATGAG GAGACAGGGT CTGCTCTGT CACCCATGCT
 17301 GGAGTACATA CGGTTGCACG CTCATGGCTC ACTGCAGCCT TGACTTCCCA
 17351 GGCTCAAGTG ATCTCCCAC CTCAGGCTCC TGAGTAGCTG GGACTACAAG
 17401 TGCATGTCAC CACATTTGGC TAATTTCTAT ATTTTTGTA GAGACGGGGT
 17451 TTCCGCCACAT TGCCCCAGGCT GGTCCTAACAC TCCTGGACTC AAGGGATCTG
 17501 CCTGCCCTCAG CCTCCCCGAG TGCTGAGATT ATAGGTGTGA ACCACCGGGC
 17551 CGGGCTCCCC ATTAAATTGT GTTGTGTTG TTTTTAGAT GGAGTTTCAC
 17601 TCTTGTGCC CAAGCTGGAA TGCAATGGCA CGATCTGGC TTACGGCCAC
 17651 TTCCACCTCC TGGGTTCAAG CGATTCTCT GTCTCAGCCT CCCGAGTAGC
 17701 TGGGATTACA GACACACGCC ACTATACCTG GCTAATTGT GTATTTTTAG
 17751 TAGAAATGGG GTTGTACCAT GTTGGTCAAGG TGGGTCTCAA ACTATTGACC
 17801 TCAGGTGATC CACCTGGCTC GGCTCTCCAA AGTGTGGGA TTATAGATGT
 17851 GAGCCACAT GTCCAGGCCAC CCATTTAATT TTTGAGCAC AAAATATGTA
 17901 CTGAGAGCCA CGCAAGAAC AAATTCGACT TATTCATGTC TCTTGAGAGG
 17951 TCATGAGGGG AAACAAAATG ATACATAAGT AACTCTGAGA GAATATGCTG
 18001 CACATGCTAA ATCTGTGCA AGTAAGATAT AGGATTTAG AGGAAGGGAG
 18051 AATGACTTCT GATTGAGCTG ACTAGAGAAAG GCTTCAGTTT TTGAGTTAGG
 18101 TGTTACGAGA TTGGGAGACT TTTCTCAGCA TATCTAACAG AAAGAGGGTAT
 18151 CCGAGGTGAG AGTGTAAAGC CTGGGCAAGG GTTGGGAGGC AGTTCTAATA
 18201 CTGAATGTC TGACTGTGGT TTACTATGTA TTTCAGGTTA TTTGTTTAA
 18251 TCTATCCAGT AATCTCTTCA TGTAACAAATT ATGATGTGT TGTTTTAGGT
 18301 GGGGACTAA AGGCTAGTAA GTAGTGAGGC TGATTAAAA CTTAAGTCTC
 18351 CAGCTTGTG GCCCCAGGTTT TTTATCTTG ACTCCACACT GGCGTTATT
 18401 AGTGAATGAC AAGGAGTTTG ATTTGTGAG GGCCCAGGAT ATGAGTGAA
 18451 AGGTATAGA CTATAAGGCT GGCAAAGAAT GGTGGAGCTG GGGAACGGAA
 18501 GATCTAAATG CCAAGGTAAG CTTGGACATT ATTTAATAGA GGCATGGGG
 18551 AGATACTGAG GATTTCTGAA GAGGGTTCT AAGTAGTGCT TTAAAAAGAT
 18601 CTCTGGTTG CAGAGGCAAG AAATAGGAGG AACACCAATT ACAAAGCCCC
 18651 GACCGAAAGC CGAGTGAGAT TTGAGGGTCA GCCATGGAAA TGGAATGAA
 18701 GGGACAGATG TGAGACATT CAAAGGATAG ACTGAGGAA TTCTGGCAA
 18751 GAATGGGTTG GACAGTGTG AAGAACACAG AAACAGCATT GATGCTTACA
 18801 TCTGGAGCT GTGCTTAAT ATTTTTGAT CAGGAGACC TACAATACAT
 18851 TTTGTATTGT GCCCCACAAA ATCATGTGCA CAGCCTAGA TGATGTATG
 18901 GACAGGTATG GGGCATGAGG AGAAAGAGTT GCCAGGGAAA GGCTGGCTCA
 18951 CATTITAGAC ATGTGGAGCG TTAAGGGTCA GCAAGACATC AAGGGCGATG
 19001 TCAGGCAGGT AACTGGAAAT GCAAACATGT AGTCTCAGAG TGACGCTGAG
 19051 TCCAGTGGTG GGGCTTTGGA AAGAACATGT ATCTCTAAGA GGAACATGAC
 19101 ATAATGGAAA CCCAGAAATC CTGTCCTTGAG CGGACTCAGG GCTGCTTCT
 19151 AGGTAATTTC GTTCATTTCT ACTGAAATCA TTATATTTAA AAGTATGGC
 19201 GCACTGAGAT GGCACACTGTA GCTGCTGCCA CCTCTTAGCT TTGGCTTTAA
 19251 AAAAAAAAAGTAATAGA ACTTCTTAA AATGTCCTTC TAGCTTTGG
 19301 ATTTCTCAA TTCAGATTG CGTCCTTCCA AGGGTCAAAA TTATATTTT
 19351 ACTATCCCTG TCTTAGTAT TTCCAAAATC TCGTCCTTAAG ACTTAGTCAT
 19401 TTTTTCCCTT CAATTGACA TGACTGCTAA AGACTTTGG CATGTTCTC
 19451 CTCCCTTCAT TTGTGATGTA ATTAAGTTGG TCTGTAAGTC TTATTTTAA
 19501 GATGTTCTAG ACCAAGAGAC TGTGAGAATA GCTTACAGTC ATTTCAACTA
 19551 ATTTATGTAT TTAAATTAA AAGTATTGAC AGTGGTGAAA ACCTGTTCAA
 19601 CAAGCAGATG ATGTTATCTT ATATATTCAC AGAGTTAGT AACTGAGCCA
 19651 ACTACTTCAT TCACAGTTC AATGAAAAC AGCTAATTCT TTAAGTAAG
 19701 TATAGATTCT ACTCTTTAA AGAGTTATCT AGGAGAGCTA CTATAAATCT
 19751 ATTATAGAAT AAGTGAATT AAGTTATCTG ACTGGGACTG GGGTGAATA
 19801 TTGACAGTT TATTGAGAAA TATGGACTGT TTTGCACAT TCATAATGGA
 19851 CATTGAGGT TTGTTAGGGG AGGAGGTGTC ATCTTTATGG CACTTTCTGG
 19901 CTGGGAAGGG AGTCAGTCTC AATTGAGATA ATAACAGGCC ACCTGGCCAC
 19951 ACACAAGTGT GTTTGGCTT AGTTACCTGT CACCACTGA GCAGTGAGAC
 20001 TCAAGAGAGT GTCAAAGTAC TTTCATGCA ATAAGACACT ACAGATCTGT
 20051 CCACACTGTT GTGAGTGAGC AGGTTGGCAC GGTGCTGTG TGCGGGCGTG
 20101 TGTGTTGACT CAGTGCTGT CCTGTCATCT CTCAGGACTC AGGTCTGAA
 20151 TTGCTCTGTT GTGACTGAG CCCAGCTGAA GGTGCTGGAA GTGAGTGAC
 20201 CCTGGAGGAA GAACCAAGTAA CAGCAGAGGG TGGATGAAAG GGAATTGATA
 20251 GTTGTGTAAG AATAGATATC TGCGGTTTT TGTAAGCCAA GACACCTTTA
 20301 CCCTTCCAGT AATTGTTCA TCTTTAATA TCATTGGCT TCATTACAG
 20351 AATCTGTATT AAAGCAAAAG TCAGCATGTA AGGTGGTATT TTGACCACAT

FIGURE 3-6

20401 TTGTCIGCTG TTGTGCCTTC TGGGTGAACG GAAGTACTGG CTTACTGACT
 20451 AGTAAATATG TTTTCTGACA ATTATAGGGG AGGGAAAGAAA AGGAAAGTCC
 20501 AATTAAGCA TTTTCTCCT CAGAGTTGA AAAATAGAAT TCATGCAATC
 20551 TTTAAATTCA CATGCCAACAA CATCAGACAA GAAGAGACTT GATAGTAGTA
 20601 AAGGTGGGA ATCAAAAGAA CAATGTAAGT TTTTGATATT GACTTCAAAA
 20651 CATGGTGTTC TATAATTAG TGTTCATTTG TTACGTGTAT GGATTATAA
 20701 TTAATTGTG ATATGGGTG GTTATTTTGT GACTTTGAT TAGGAAACAA
 20751 ATATTGAGCC ACTTCAGAG GCAGACTATT TTGGAAAAAA AAGTCTGGTA
 20801 AAAGTATGC TTAATCTAAT TAATCTGTCT TCATCTCTT AATTCTATCAA
 20851 GATGACTTG GGTGCTGGT GGCAACTGAG AATGGGTTAT GGAAGAACGT
 20901 CAAGGCAATG TAATCCCTAT TATTTACGGT TACTTGAGAG GATAAAATTAA
 20951 TCAGCGGTCA CTATCTTGT GATAATCACT CTATTGAGCT GGAACATATCC
 21001 TTAGTATTTT GGAAAGCAAG TCAGTGAGTT AGAACTGTCA AAACGTATCA
 21051 GCTTTCTAA GCTTAATGAT AAGTGAATAG AAACATGTTG CCTTCACCCC
 21101 TTTCCTCCCT GCATTGAGC ATGATCATTG TGTAACTCTG GAAATGGTTT
 21151 ATGGAACAAAC AGTGAACAAAT CATTGATACA CTGCTTGTG GTAGATTTTC
 21201 AGATAGGCTT TAGACAAAGT TCAGAGCCTT CCCTCTAGCT GGGGATTAAC
 21251 AAAGCTGCCT TCATAGTTAA ATGTTTGAC CCTGTGTATG CATTTCAGT
 21301 TACTAGAATT AGGTAAGTTA GTGTTATAAA ATTGGTTGA GTGTGGATTG
 21351 TTAGGAAAGT GGTGCTTTG GTGGCAGCAA TTCTGTATG CATTAAATAG
 21401 ATACATATTG TGAACTAGTC GACATTGTTT CAGTCTGTAT TTATTAGATG
 21451 CTGGGGTGGG TATGGGATA AAGAAAGTA TGAGGGGTCT TGAAAAGTT
 21501 CATGAAAAAA ATGTACACTA TGAAAAAAAT CGTGCATGG ATTICAAAT
 21551 ATTTTGAAAC CAAATCAAC TTGTACTAAC TTGTTACAAC ATGTCGTGAA
 21601 TTGTTACAAC ATGTCGTGAA AGTTGAGAC ATTAAGAAAT GATATCGCAC
 21651 CAGTTTTAA AAAGCGCTA TCAGGGTAAC ATGAATTCTG CTAAAATTGA
 21701 AGCAAGAAC AACATCAAAT TTATGGTGTG GCTTGGGTAG AAGGATGGTG
 21751 AAATCATTGA TGCTTACAA AAAGTTTATG GGACAAATAC TCTAAAGGAA
 21801 CCACGAGTTT ACAATGGCT AACATCCCTT AAGAAGGGAC GAGATGATGT
 21851 TGAAGAGGAA GCCCACAGCA GTAGACCATT CGTGTCAATT TTCAAGGAAA
 21901 AAATTAAATCT TGTTCATGCT GTAAATTGAG AGGAAACTTT ACATGAAATT
 21951 TAAACAAAGT GGGATTGAGA TCCGTGGCA TATGTCTGAA GGATTGTAAT
 22001 AGGAGAGGAA ACATGGCTT ACCAGTATGA TGCTGAAGAC AAAGCACAAAC
 22051 CAAAGCAATG GCTACCAAGA GGTGGAGTG ATCTAGTTAA AGCAAAAGCA
 22101 GACTAGTCAA GAGCAAGGT CATGATAAGA GACTTTGGG ATGCTCAAGG
 22151 TATTTGCTT GTTACCTTTC TGGGGAGCCA AAGAATGATA ATATTTGCTT
 22201 ATTGTGTGTG TTTGGAAAAA ATTAGCCAA GTTTAGCAA AACAACACAA
 22251 TACCCAGGGA AGCTTACCA GAGAGTCCTT CTCCACCCAGG ACAATGTTCC
 22301 CGGTCTACCTT CTCATCAAA AAGGGCAATT TTGCAAGAGT TTGATGGGA
 22351 AATTATTAGG CATTCACTTA CAGTCCTTTT TTTTTTTTTA GTTGGAGTCT
 22401 TACTTTGTCT CCCAGGCTGG AGTGCAGTGG TGCAATCTG GCTCACTGCA
 22451 ACCTCCACCT GCCAGGTCA AGCAATTCTC CTGCTCAGC CTCCCAAGTA
 22501 GCTGGGATTA CAGGGGTGAT CCACCATGTC CAGCTATTTT TTGATTTTT
 22551 AGTAGAGATG GGGTTTCACC ATGTTGACCA GGCTGGTCTT GAATTCTG
 22601 CCTCAGGTGA TTCACCTGTC TCGGCCCTTC AAAAGTGTGG GATTACAGGC
 22651 ATGAGCCACT GTGCCCTGGG TATCTTACAG TCTTGTATCTG
 22701 ACTTTCTTTT CTTCTCAAT CTAAATTAAAGGG CACCTATTTT
 22751 TCTTCAGTTA ATAATGAAA AAGGACTGCA TTGACATGAT TAAATTCCTG
 22801 GGACCTCAA TTCTTTAGAG ATGGACTAT GGCTGGTATC AACTCACAAA
 22851 AGTATCTTGA ACTTGTATGGA GTTATGTTG AGAAATGAAG TGTATTTT
 22901 CATTATCTTT TAATTTCATT CTTTAGTGA TTTTTGAGG TCCCCCTGTA
 22951 TACATTTAA TCTTAAGGG AAAAAAGAAAG GAGGAAGTCC TAGCCCTGTG
 23001 CTGTCIGCTG AGGTACAGTG TCTGAAACAC AGACCAAGT TCACCCCTTG
 23051 AAATTGAGG TTTCATTCGA GGAGGTCTC AAAAGAATA AATGAGATTG
 23101 CTATGCAAGT GGAATCAAAG AGCACACGGC TTATTTATCA TAATCAAAT
 23151 AATGCCATT TCTATAACAA CTTCACCTGC TTATGACAT TGAAATTGT
 23201 TGCCCTGATA AGCTTCCCCGG AGATAAAAGTA ATTCAGCTAA GTATTATTC
 23251 CAATCATAAT TTGTTGTCT TATGAGCAAC ACAAACTAT ATATGGGATT
 23301 GATTCACTGC AGAACTGGAA TAAATATAAA TTAGATCTT AGAAAAGAAA
 23351 CGTAGATTAA AAAATCTTAT GTTGAAGGC TCAATTAAATT AAATGTAATT
 23401 AATTTTTAA AATCAGCTT ATTGAGGGAT GACTTAGATA TTATATAAATT
 23451 CACAAATTAA AGTGTACAG TTTGATAGTT CTGACAATCA AACTGTATAC
 23501 AATCATGTAA CCACCATCAC AATCATAATA TAGTGTGTCC ATCACCCCCAG
 23551 GGTGACCTT CGTGTACCTT TTGCAAGTTA GTCTTTTCC CITACATTCT
 23601 GGCTCCTGAA AACTTGATCT GCTTCTGTG ACTATAGCTG TGCTTTTCT
 23651 AAAATTATAT ATGAATGGAA TCATACAGTG TGTTTCTT TGTATCTGTT
 23701 TTTCACCTAG CATGATGCTT TTGAGATTTC TCCCTGTTGT GGTATGTATT
 23751 AGTAGTTCTT TCTTTTAT TACTAAGTAG TATTCCATTG TATGCTATG

FIGURE 3-7

10/506513

23801 CCACATTTT TTTTTTTTT TTGAGAGACAG AGTTTGCTC TGACATCCAG
 23851 GCTGGAGTGC AGTGGTGTGA TCATGGCTCA CTGGCACCTT GACTTCCCAG
 23901 ACTGAGGTGA TCCACCTGCC TCAGGCCACT GAGTAACCTGG GACCACAGGT
 23951 GTGTGCTAGT CTGTCTAATT TTTAAATTGT TTGTAGAGAT GGGGGTCTCT
 24001 GTATATTGCC CAGGCTGGTC TCAAACCTCT GGCCCTAACG AATCCCTCTG
 24051 CCTGGGCC TCAAAGTGTG GGGGTTACAA GTGTGAGCCA TCAACACCTGG
 24101 CCTACACAA TTTTTTATCG ATTCAACAT TGATGGATAT TGGGTTGTTT
 24151 TCAGTTGTTG CCTATTATGA ATAGAACCTGC TATGAACATT TGATGCAAA
 24201 CCTTTGTTGG GATGTATGTT TTTATTTCTC TTTTGTACAT TAAATTTAAA
 24251 TTTAAATTGT GTCTGTATT ATTGTATT TAAATTCTC CAAGTGGGTA
 24301 ATACTGTGTA CTTTTTTTTT GAAATTTAAA AAATTGTGGC TGAACAAGGA
 24351 GATAAAAAAG TAGGAGTGAG AGGACTCTGG AGAGTTACAG GGCTTTGGTT
 24401 TAGAGGATTG GATGAATAGT GGTGCTGCCA ATAAAGAAAT TAAATATGG
 24451 CTGATATTC CTATATTAA GAAAGACCA AGAGGGTCCA TTGAAATGAG
 24501 TCAGTGGAA ATCTCTGATG ACTTCAGCA GCACGCTTC ATCGGCTCTGG
 24551 ATATATGGGA AGTGAAGTCT GATTATAGTC TGTGGAGCAG TGAATGGGAG
 24601 GAAGAGATAG GGTCACAGGC TAAGAAGGGG GGAAGTCAG TCAAAGGGAG
 24651 AAGTAGGGTG GTAGCTAGAG GAAGATTAGA GTCAAGGGAG GGTAAACATT
 24701 TTTTTTTTTT TTGAGAGATAG GAGTAGCTT GAGAACTAACT TAAAGAAGGA
 24751 GCCTGTAGAG AGGGAGGGAG TGAAGTTACT AAAGGCTAA TTGATGGGGT
 24801 AAGTTTCATG ACCAGATCAG ATCTTACAA GGAAGGTTCT TGCTGGGGGG
 24851 CAAGATTCAA AACCCCTATT CAGAACCAAGG AGAGAAGAAA GTAAGAATGG
 24901 GAGCAAATGT AGGTAGGTTT GGTGAGGATC AGGAAATGGA GGGGAAGAGG
 24951 TCATTTAAATG TGGTCTGGG GTTGGAGCAG AGATTGGAAG AGAATGGCAA
 25001 AAGTTGGGA GCTGATTAGT GATAAGGAAA AGGTTGAGA ATCCGATGAA
 25051 GATTAGAAC CATGCTTGT TAGTGAACCT TGTTCTAAAG ATTGTGCCCCCT
 25101 TACCCACCTC CAGCTGTCT CTGATAGGTG AACTATACAA TTGATGTAAG
 25151 GCTGGCAGAT AATCAAAGCC AAGAAATTTC ATGTTTCTA TCTATTTCA
 25201 CTTCCGTGCC ATATAGCTC TCTCATATAG TACTCATATG TTTTGAGTTT
 25251 TTGGTGAAGC TGATTTAAACA TTTAACAACT TTTTTTTA CATTTTTAT
 25301 TGTGACAAAA CATATATAGC ATAAAATTAC CATTCTGGT AATTTCACCA
 25351 AACCCATTAA TAGCATAAAA TTTACCATTT TGGTCAACTT ACTGTAAATT
 25401 ACTGCCAGTT CTGTACAGCC ATTTGTTAA TGCACTCTGC TCTAATACCC
 25451 TCCAAGGCAA AATTGCAAAT AAAAACCTGT TTGATTTCT ACTTAATT
 25501 GGTAAATTAA CAAAAGGGC AAATTITATG CTATAAATT TTTTTGTTT
 25551 GACATTAAATG ATATGTTTG TAAAAAAAT TGACAGATAA AATTGTATAT
 25601 TTAACATGCA TAATGTGATG TTTGTATTA TGATAACAT GATGTATATG
 25651 TCATACTAA CATATATACA TTGTAGAATT GTAAAGTC GGTAAATTAAAC
 25701 AAATGCACTA CCTCACACAG TTATCATT TGTGGTGAGA ACATTTAAC
 25751 ATCCACTCTC TTAAATT TCAAGAATAA AATTTTATCA TCTGGTCATG
 25801 GTGGCTCAOG CCTGTAATCA CAACACTTTG GGAGGGCAAG GCGGGAGGAT
 25851 TGATTGAGAC TAGAAGTTCT AGACCACTTG AGACAAACATA CTGATACCCC
 25901 GTCTCTACAA AAAATAATAA AAAAGAATGC AATATGTC AATTTCTTG
 25951 AATTATTTT TCCTACCTAA TTGTCGTTAT ATATCCTTA ACCAACGTC
 26001 GCCCCATTTCC CTCCTCTC TAACCGATCC AGCCTCTGAG ACCATTGTAC
 26051 TTCTATTC TATGAGATCA GCTTTTAAG ATTCTACATG TCAGTGAGGT
 26101 CGTGTAAAGTA TTGTCCTTC TGTAACCTGGC TTGTTTACCA ATTGTCAACCA
 26151 TTATTAAGT GTACAATTAA GTGGCATTAA GTACATACAG AATGCTGTTT
 26201 ACCCATTACT ACTGTCTAC AATTTTAATT TGAGGCATGA CTTTGTCTAC
 26251 TCTCTCTAT CCTTTGTACC ATTCTGTATC TATAAACTCA ACAAAAGCTC
 26301 TAACTGAGTA GAATATTTT GTATGTGTGT ATAGATGTTG GTGTGTGTAT
 26351 ATAGGTATGT ATAGATATAG ATATAGATAT AGATATAAA TTTTTTTTG
 26401 AGACAGAGTC TTGCTCTGTT GCGGGGGCTG GACTGAGTGG CATGATCATG
 26451 GCTCACTATA GCTCTACCA TACAGGCTCA AGCAACTCTC TCACCTCAGC
 26501 CTCCCAAGTA GCTAGGACTA CATGCATGCA CCACCATGCC TGCTAATT
 26551 AAAAATTTTCT AGAGATGGGG TCTCTGTGTT GCCTAGGCTG
 26601 GCCTCAAACC TCTAGGCTCA AGCAGTCCTC CTGGCTTGGC CTCCCAAGGT
 26651 GCTGGGATTA TAGGAATGAG CCACCGTGCC TGCGCAGTAT TTGTATTTT
 26701 GATACTGAGC TTAAATTGGG CAAGTGCTGT GCAAGGCACA AATTTGGGT
 26751 TTAGCTTCT AACTATTTGG TTGTAAATTAT TTGTTAATAT CTGCTTTCC
 26801 TAGTCATGGA AAGTCATGA GTGCAAGGGC TGTGCTGTC TTGTTTACAA
 26851 CTATATTTGC GCTGGCCAGC ACAGTGCTTT ACACATAGTA GACATTCACT
 26901 GATGTTCTG AACAATGAA AGTCCTTCGC TGCAAGAAGA ATTATTTCA
 26951 GTTTAATAAG TTTCTTCTGA ATGCTTCTA TGAAGTAGGC AAAATTGTA
 27001 TTCACATATT AATACAGATT ATAGGTATGG CACATTCAA TGCTATTTA
 27051 ATTAGTAGAA ATCAAAAAAGA GTTTTATTG GCAATTTCGC TTGGGAGGGT
 27101 ATTAGAGCAG ACTGTGCACT AAACAAATAG CTGTACAGAA TTGGCAGCAA
 27151 TAATCCCAAAGT TTGGTGAAGGC TGAGGTAA TTAGGATAAC TTGACAGGAA

FIGURE 3-8

10/506513

27201 GTGAGTTAAT CAAATTGAG AGTTAACCT TCCAATAATT TATGTTAGA
 27251 CATACTCAA GTATATCAGC AGGAACAGG AACTTTAGTT GCAGAAATGCC
 27301 CAAAACACA AGAACTCCAG TGAGTTTCT GGCTTCAGG AATGTTTGG
 27351 AGGAAGAAAA ACCAATAAAA TGATTTGGG GTCATTTGT TOCATTACTC
 27401 TATATTAAAT ATACTAGAAT TTAAATATT AAATTAAA AGATAAAAAG
 27451 ATGCAGTTA CCTATTAACA AATTAAATAA TTAGGAATT CTACTTAGIT
 27501 CTGTAATCT TAATATGAG TAAATATGGG CATTCTGTG TTAGCTAGAA
 27551 TTAGATAGAG TATTGOCATT TTTTCAACT GGCCTATGGT TAAATGGAG
 27601 TAAAGGGCA AACTACACAT ATAAGAATTA GTAGTACAAT ATTAAATACA
 27651 CCCCTGTAAG AGTTATCACA GTGTGTCCTC TGTGAAAAGT AAGGGCTCCA
 27701 TGTGTGCTTG TGAAAAGGC CACTGGAGGC CCTTTCAAA ATTAAATCT
 27751 GCCTCCAGCA AGGTGTTTTT CGATCACATG GAAAGGGAA GAAGAAGCTA
 27801 TCAGGAGCTC TGGGGTTTTT TTTGTTGTTG TTTGTTGTT TTRGCCACTTT
 27851 TAACTCTCAA GCTAAAATG GGGTTTCATT TGAGGAACCA GTAATAGAAA
 27901 ATTTCTTATG TACATTCAAG AAAATCTAGT ACTGAGTGGT TACTTTGGCT
 27951 TTTCATTGTC GGATTGTTG GTGTGTTGAGT ACATGCAGGC ACTTGTGTTG
 28001 TTAAGCGTGT AAGGCAGACA GACAGTGGGT ACAGGCTTT GAAATGGACT
 28051 TCTGGCAAA AGTAATAGAG AAAAAGAGGA ATACAATAA GGGAGGGAGGG
 28101 ACAGGGAAAGA GCAGAGTCAC AGGAAAACAGT GAATGAGGCT GCAGTCTCAG
 28151 TCGCCCTTC TTGTCCTC CAGTGTGTT GGCCTGCTTA TGATGATGCT
 28201 GGTTTCAGC CAACCTTGAG TGAGTAAAAG CGGGCTGGA GGTCTCAGTG
 28251 CCTGCGTGGC TGATATGAGC AGCTTGCATT TCTGACTGGG CCTGGAGCA
 28301 GCAACAGCAC AGATTTCCAG GAACAGTTC CTCITGTCATT TTATTCCTG
 28351 AGTCATCAAA TTAGTTTATT CAGACGTCCTG CTGTCCTCAG CTACATACAG
 28401 ATCAACAAAG CAGGGAAATT TTTCTCTTCT CTCCTCTCCC TCTTTTTTTT
 28451 GTATTCCAT TTGTTTGTG ATACCTTTTC TTTGTTTAAG TCAAGCATT
 28501 GAACATCACT AGTACCAATT TCCCTTAGCA AGCATAGGAC TTCTGTCCTA
 28551 CTTAAATGTC TTCTAATGCT GTGATGTC ACAGTTAGTT GAGACGTTAA
 28601 AGATGTTCCA TACATGTGAC TACATTGGA AATCTCAAA ACATCATATC
 28651 GAATGAAAAG ACAAAAGTTG GAAATGTC TGATGATGCC ATTTCCTTAA
 28701 AAAGTCATGT AAAGCAATCC TACCACATCT CATAGAATCT AAAAGGCTAT
 28751 ACTGATGCTA AGATGACTA TTATTTCTG TACACTGAGA AAGGGGGAAA
 28801 ATTCGCCACTT AAATTGTTGAT GTAATGTC TGATGGATT GTAAGATACA
 28851 TCTACATTAA AGAAATGGTA TAATGTTAAA AATATGCATT TAAATTGAA
 28901 GTAAATTAA ATTAAATTAT TTCAAAGGAA ATAAGGTTAA TGATTTTAT
 28951 TGAAGCATAG TTATGTAATA AAAATAGAAA AGCATGCATA GGAATGCTAT
 29001 TTAGGCAATA CAGGATGTTGG TAATCTCTAT AAAGGGAGGG AGGGAAATGG
 29051 AGGGGGAGGG CCAGAGGAGG GGCCTCATCT CTGTAGTTA TTTTTTTAAA
 29101 TTATAAAAGCA AATATTACCA GAGTTAAGAT TTTACAAAAT TCATTGGTAA
 29151 GCACCTATAA TTTCTGAGT GCTTCTAGTA TTTCTATAATG AAAAGTATGT
 29201 ATTTAAAGG TAAGTTATCT ATTTATTTT ATTTATTTT TTGAGACAG
 29251 TGTCTCATTG CATGCGCCAG GCTGGAGTGC AGTGGTGTGA TCTGGCTCA
 29301 CTGCAACCTC TTAAAGCTA CATTATTAA AAGTCACATA CAAAGCAAGT
 29351 TGCGAAAGCC TGTATGAGT GGATTCTATT TTTTTAAAT AGTATTTAAT
 29401 TGTATGTTCT TCTACACTT TTCTATGTC CATCTTACCA TAGCTGTGCC
 29451 TTTTTGGTG GAAGTGAGGA CAGATTGCTT TCCACATCTC CATTGGTG
 29501 TCTGAATTAA AAGATGGACA AGTATCATGT ATTATCTTAG TAGTCATCAA
 29551 ACAAGGAAAA AGTTTCCTT GTTGTGTTG TTTTTTTAGA TGAAGTCTCC
 29601 GCCCAGGCTG GAGGCCAGTG GCACGGCTT GGCTCACTGC AACCTCTGCC
 29651 TCTGTGTTTC AAGCAGTTCT CTGCGCTCAGC CTCTTGAGTA GCTGGGATTA
 29701 TAGGCCTG CGATCAAGGCC GGCTAATT TTGTTTTGAG TGAGAGACAA
 29751 GGTGTTGCCA AGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAGGTGAT
 29801 CCACCTGCTT TGGCCTTCCA AATTGTTGGG ATTACAGGGG TGAGCCACTG
 29851 TGCCCGGCTT GAAAAAAAGTT TTAATGGTA AAGATGTCAT GGAATGAATA
 29901 GGATTGGCTG GCATTATTTC TTGCTGTTAA TAAGCAGTGA GAATGTTTC
 29951 CATTATATGT TTCTTTGAG CCAGCTTTCT GTTGTCTCCC TTATCTTTC
 30001 TTCTCAGGC ATGTTGATC TAGAAAGGGT CAGGAGTACCC TTGATAAAAAA
 30051 TTATTGTACA AGTTGAGCAA AACTCAGTAG TATCATGCC AGAGATCTGA
 30101 TAAAGAGGCA CTTTTAAAT AGAGCCTTGA AGCTAACAAA CTTTTTTT
 30151 TTAACCCCTT TACTGAAACC TAAAAAGAGG TCTGAGTTT TTCCCTCTG
 30201 TCACCAAGATG AAAGGGCTGT AGTAGTGGTT GCTTATTCTC CAGGCCAGTGA
 30251 GGAATCAAAG GACTGAAGGG GTGTTGTTT TATCATACTA CTTGTAGGG
 30301 CCCCTTACCT CCTATACCA TGAAAAAGGA ATATTCTTA TATCCCTAA
 30351 TATTCTTTA GTATCACACT TAGGTTTAA TGTCCTTACT GTTAGAGTAA
 30401 AATAATTGG GCAAGACCAA TTTTTAAAT GGCAATATAA GTCACATCAC
 30451 TTGATTGAGA ATCTCACTCC CTAGCATCTC GCGTAATGAC TCATAAGAAA
 30501 GAAAAGCTA AATGCAATGAA GAGGTTCACT ATACCATTAC TATAAAAAG
 30551 TAAAAATTG TTTTGTTAT TTTTTTTG TTTTTGAGA TGAGTCTCT

FIGURE 3-9

10/506513

30601 CTCTGTGCG CAGGCTGGAG TGCACTGGCG CAATCTGGC TCACTGAAAC
 30651 CTCCGCCACC TGGGTTCAAG CAATTCTCAT GCCTCAGGCT CGGGAGTAGC
 30701 TGGGATTACA GGATGCACC ACCATGCCG GCTAATTTT GTATTATTAG
 30751 TAGAGACGGG GTTTCACCAT GTGGCCAGG CTGGCTCGA ACTCCTGACC
 30801 TCAGGTGATC CACCCACCTC AGCCTCCAA AGTGCCTGGG TTACAGGCAT
 30851 GAGACACTGC ACCTGGGCAA AAAAGTAAGT AATTGAAGT CAACCTAAAT
 30901 GCCCCCCAAT ACAGGAATGG TAAATGCTG ATGACCTACT TTATGACTA
 30951 TGATGCAAAT GCAAATGATA ATGGTTACTG TGCAAGAAC TGGAAGAACT
 31001 TGGTGAAGC AGGATGTACC ACATGACTGT AACTCCAAA TGTGCTTGCA
 31051 TGTGAGGAGA GATCAAGGGA ATATAGAAAA ATGAAGACAT AGTTGTGTTA
 31101 GGGTGGTAGA ATTTCAGTGT GATTTCTCCC CCCACTATTG GTAAAAAATT
 31151 TTGTACTTAA TTCGTTGCG GCAGCCAGAT CTTTAAAGG TAAATTGAA
 31201 TTTCTCTTA AGAAAATGGC AGACAGAAGG ATGGGGATA CTAGAAAAC
 31251 AAAAGTAGTG CCCCTTTGA AGATAAAAAGT AAAACATTTT AAGCCTGGAA
 31301 TTGCTTAGC AGTACATGTA TTGATTATT AATTGGTCC TTAGAAGAA
 31351 AGTTGGCCA ACACAATTAC ATGGAAGTTG GTTATTGAA GAGGATTGAT
 31401 AAAAGAAGTG GGAAGGTCAAG GCCAGGTGTG GTGGGTCACTG CCTGTAATCC
 31451 CAGCCCTTG GAGGGCGAG GTGGGTGAT AACGAGGTCA GGAGATCGAG
 31501 ACCATCTGG CTAACACGTT GAAACCCCCGT CTCTAATAGA AATACAAAAA
 31551 AAATTAGCCC AGCATGGTGT TGGGTGCTG TAGTCCAGC TACTTGGGAG
 31601 GCTGAGGAG GAGAATGGCG TGAACCCCCGG AGGGGGAGGT TGCAGTGAGC
 31651 CCAGATCAAG CCACTGCACT CCATCTGGG CGACAGAGCG AGACTCCGTC
 31701 TCAAAAAAAA AAAAAAAAAA AAAAAAAGTG GGAGGGTCAA AGCCAATGTG
 31751 CACGTTATT CTTTGTACC ACCAAATAAA CGAAATTTT GGACCAACTT
 31801 TACTTTAGTC AATATTTGGT TATTTGCTT GAAGCTATT GTTTGCAATA
 31851 ATGCAATTAA CATCTCAAC AGAGCCAAAG TCTGACCCCTG AAATGGCAGC
 31901 ATCTTAACTA ATTATATCAT TTGAATAGAA ATTGAAACCT TTGAGGGCAT
 31951 GAAGTACTAT TTCTTTCTC TATATCTT GTTTTGGTT TTGCTTCAC
 32001 CACCGTTTA TGACTACCAA AACCCCCACAG ATCCCTGAAAT TAACTCACAG
 32051 CTGCCATCTT GCACCGTAG ATAGAATTCA GGAGCTGGTG ATGAATGGGG
 32101 AGAGAATAGA AAAACTAATA GACTGTAAGA ATTTCAGGAC TCTGTGGCT
 32151 TGCTGAACAA TTAATCCAGC CCCTTCACTT TACAGGTAAG TAAACAAGTC
 32201 CCAGGGACCC AGCAGTGAAC CTGTCCTTA GGACTCAA TCTAGTGCAC
 32251 TTTCTGTTAT ACTTCAAGGA GAGAAGCTGGA GGGAGAGCGA AGCCAAAATA
 32301 CTGACATTT AGAGGCTGCT TTTTAAGAAA GGATAGGACA TTGGACTTTGG
 32351 TGTCTTAACT ATGTTAAGT ATAGAATTTT TAAAAACACT ACCACTCCAA
 32401 AACAAAAATA GTGAAAAGAT AGGAACAGGC AGTTCAACAA AGAAGAAAATA
 32451 CAGTAGGCAT GAAAGAATGC ACAACATAAT TTAAGAAATG TAAATAACAA
 32501 ATATCTATTG CTATCTCAAG AGAAAACATT TACTATGAGC TTATTATTTC
 32551 AAACCATTGG CCTCATAGGG CTTCCTGTT ACAATCTACC CTAATTITAG
 32601 GAAATGTAAT TATAACATAA AAAATGAAT GCAAATGATA AAAGACGAAG
 32651 TATAACCCGC TCAATAAATT TTCTGAAAGT TATAGTAGTT TTAAACCTCT
 32701 TTTTATTCTAT TCCCTCCAGT TCTGTCAGC ACCTGTAAAG ATGAATTATT
 32751 GGCTGGGTGT GTGGGTCAAC GCCTGTAATC CCAGAACCTT GGGAGGGCGA
 32801 GGCGGGGGA TCAAGGAGGTG AAGAGATCAA GACCACCTG GCCAACATGG
 32851 TGAACCCCTG TCTCTAA AAAATCCAAA ATTAGCTGG GCGTGTGGT
 32901 GCATGCCCTG AGTCCCAGCT ACTTGGGAGG CTGAGGGCAGG AGAATTCCCT
 32951 GAAACTGGGA GTGGAGGTT GCAGTGAGCC AAGATGCCAC CACTGCACCC
 33001 CAGCCTGGCA ACAGAGTGGAG CCTCCGTCTC AAAAAAAAAA AAAAAAAAAA
 33051 AGGTGAATT TCTCAGGTT TATATGGCAT TGATGGACCA CTATTGAAGG
 33101 AAGCTGTGAA GGACTCAAAG CAGTTGAGAA TAGGTATGCG CACCTAATT
 33151 TACTTGCTT TCCCTGCCACA CACAACCCAGA GAAGCTGGTT CATCTCTTAC
 33201 TGAGGAATA TTTTCATGCT TATTCAGAAG ATTTTCAGG ATCCTCAGGA
 33251 AGACAAAGCC AAAAGAACAAAG AACAGTCAAA GTAGGAACAG GACCAAAAGT
 33301 CTGCACAGTC ACTGGAGGT GTCATGCTGA AGAAGGCAGG GATGGGACTT
 33351 TGAATGAGG CCAAGTGCAT TTCTGTAACT GAGTGGGTTA TCTGTTGTTG
 33401 GCAAGCAATG TGCCTACACCT TTGAAGGGCT AAGCTAGCCC AGGGAGTTCTG
 33451 ATAAGAGCTT TGAACCTTAAAT ATGGCTGACA CAAAATAGG TCTCTCAGA
 33501 TCTTATTGG AGGTAAACCG GTAAAAGTG ATAAATAGTA TTGCTTTTTA
 33551 AAGTCTTAA CATATTTAG AGGTGAGTC GTCACTACCAT ATAGAGATGC
 33601 TTCTTAACTA TCCCTGTAG CAAGAATTGG CAAAATATT CTCTGTAAAG
 33651 AGCCATTAG TAATATTTC AGAGTAGGCT GCATAGCTC TTTTGAGCT
 33701 ACTCAGCTTC ATACAACAAG TAAACAAATG AGTGTGACTG TATTTAGTA
 33751 AAACCTTGT AGAGCTAAC ATTGGAATCT TACACAGTTT TTATATGTTT
 33801 TGACATATTTC TTTCGTTTT TTCCACCAT TAAAAATGT AAAAGCATT
 33851 TGTAGCTTGT GAGGTGTACA AAAATGAGCA GTGGACCATG TTGCTTGCG
 33901 AGGGCACATT GTGCTGATCT TTACTCTATA GCATCACTGC CAGTAGAAAT
 33951 ATAATGCTAG CCATATGTTA TGGACTGAAT GTTTGTAACC CCCAAAATCC

FIGURE 3-10

10/506513

34001 ATATTTGAA GCTCAAACCC CTGGTGTGGC AATATTTGGA GATGGGACCT
 34051 TGACAGATGT ACTTAAGGTT AAATGAGGTC ACAAGGGTGG GGTCTGGTC
 34101 AGATAGGATT AGTGTCTTA CAAGAAGAAA CACCAAGATACTC ATTCAATTGAG
 34151 AAAATGCAGA ACATTTGAAC CTTACTGGTT TAGAAACCATAATACTGGCA
 34201 GGCTTGCTGG TCTTCATTTT TATTATTTTG AATGCTTCTT TTCAAGTATT
 34251 TTATGTATCC AGACCCAATT TGTATGATAA GGGAAATTCTT TTCAAACCTAT
 34301 TAGGTGAAGT CTTAAATTAT GAAGTTGGCT TAAGCCATTA AGTAGTATTA
 34351 ATGGGGACAT CCATCTTGA AATTAACCTGG AAATGTAGAC TAGAAATATA
 34401 AAAAAGTGTG GTCATGACTA ATGTCCTGTAT CCATTCCCCA AAAAAGAGAT
 34451 TTGCGTATGT CCTCACATTG CAGAACCCACA CTGACACTCA GGGAAACATG
 34501 CTGACGTCA TCTTCCAAACA TCCCTTGTGTT GGATTTCATG AACATTTT
 34551 TTCCATTCTC CCTTTTCTG TGTTTGTAA TCCCTTCTG GATTCTTGAA
 34601 ATCAGAGGCA CTTATGGAG TTGATAAAATG CGAGTCTTC ATGTCACTGT
 34651 TTAGAAATTAACTTAGCTT ATGGACTAGT TCAGGCTTAG ATAACCTCTGG
 34701 AAGTCTTGC ACTTTCAAAT ATACTTTTTT ATAGTTGAGT TTCTACACAA
 34751 TATAACATT TATAACTAA ATGGAAGTAA ATGAAATGC CAAAATGCCA
 34801 GTTGTATTCTG TTAATGTGTG CATCCCTCCA TTCCAGAATT CAAAAAAATAT
 34851 CAGACATAAT GACTTTTATT TGTTTATTAT ATTATTAGAT TTATCAGATA
 34901 TAAAATTGTT CTTTTAAACT GCTATTCTA AACACTCTT GTTCTTCTG
 34951 TTATCTTGTG AACTGGTAAT AGTTTICAGA CTGGTGTG TCCATGAACC
 35001 ACTTCAGCA TTGGTCCAGA TGACTTTCAC TTATACCATG AGCCAGCAGA
 35051 TACTGTAGAT TATTTGGCTG TTTTAAAGA GAACATCATA TCATAGTGT
 35101 GGTTATTAAAT ATTTGAGCAA GATATTAGGG TTGTCCTGAT GTCCCACATCA
 35151 TTGTTGGAGTGT TTAGTGTGTG TTGTTTTT TAAGAATTGA CTTGGAAACAA
 35201 TTATCTTAA GTTGTAGGG TTATTTTAT TCTTGTAGTAC TAACGGTATA
 35251 AACTGAATTTC CACTGAAATA GAGCTTATT TGATGTATAA TTTTGAAGT
 35301 TATTTTTAT AAGTCTGTGG GTAGATAGCA GCAAGTAGG CACTTTTATT
 35351 CCCTAATAGA AAAAATATAA TATTTTGTCA AAATTTCTT GTTCTTATTCA
 35401 TTCATTCAAAT GATATTTGG AATGTTTATT TCCAGGAAAT TTTGGAATAT
 35451 ACAATACAAAC CAGCTTCTTA TAACTCCACT TTAAGTGAGC CATAGGTCAA
 35501 ATAATGACCA GCAAAATGTA ATGACACGTG TGCTCTTAC TCCCTGTG
 35551 AGGAATTGAG GCACTCTGGT AACCCCTGTAG GCCTGGATT GTCCAGTTCA
 35601 TTGGCAGCAG CATTATCCAG ATTTTATTGT GGCCGGCAAC GTGGCTCAC
 35651 ACCCGTAATC CCGGCACTTT GGGGGGTGA GTTGGGCTG TTGCTTGAGC
 35701 CCAGGAGTTC AAGACCAGCC TGGGCAACAT AGGAAACCT GTCTCTACAA
 35751 AATATATAAA ATTAGCTGG GCGTGGTGGC GTGTGCTGT AGTACCCAGCT
 35801 ACTTCGGAGG CTGAGGGCAGG AGGATCACCT GAGCCAGAA AGTTGAGGCT
 35851 GTGGTCAGCT CTGATTATGC CACTGCACCC CAGCTTGGGT GATACTGT
 35901 GACCCCTGT TAAACAAACA AAAGAGATTG TATTGTTTG TGAAAAACAT
 35951 AGTTTTAGA GAAATTCTGT GTTATTCTC TATTCCTTAC AGACCTGGT
 36001 TTAAAGAAAC TATGGAAAGC TACAGACTAA CCTCCCTTTC CTTGGTTT
 36051 TTTCCATGT TATAGCAGAG AACCAGCCAG GGCCAGATTG CTGGCTTGT
 36101 GTCTCTGCA GTTGCACAGG GCTCTGTCA GAAGGGTCCC ATACTTGGCT
 36151 TAATGCTCTG CTGTCAGCAT CTTGAAAATT TTAATAATT TTATATTCA
 36201 TCTTGTTTTG TAAGTTAA GCCCAGTGGG CCAGTGGAGG CTGTTCTAGG
 36251 GGTCCTGGTT TGGCTCATGA GAGGTACATC CTTOCCACCT CCCAGGATG
 36301 GGTCCTCAGC AGCTGGCTT CTGTAACCTG GCACCCCCAGG CCTTCTTGG
 36351 CCCCTACCCCG GTTGTCACTG TTGCCCCAC CTTGGGTGAT GACTGGGTCA
 36401 CATGGGAGAG GAGGAAACCC ATGTTCTGCT GTCAACCCCT ACCTCTTGT
 36451 GGGTCTGGGG TACAAGCTCA GGGAGGGTTG GGATCAGGCG TCTGTGACTC
 36501 ACAGTGTGTG GGGGAGTGT GGTGGTCATT TTATCCCAGG CTGGCAGGCT
 36551 GCTGGCATAT TGATGAGCAG CTGCTGGCAT GATGATTTGT CCTGACCCCTG
 36601 GACCGGACTC TGTTATCTTGG CTTTAGTCTA GTCACTTCT CAGCATTCCT
 36651 TGGAAGCCCCA CCTAAACTGC AGAGACAAAG AAGAATATGC TTGGGATT
 36701 TAAAGATGGA ACCCCATATG CTATCAATTG GAAAGAGGTT CAGATTCTGG
 36751 CTGGGCTGAA TCACTGATTG TCCAGGGCAAG TGGAACTTAA ATGACCCACT
 36801 AGTGCCTTT GTTCACTGTG GGCTGGCTGG GGAGGAAOCCTTGGCTTTAA
 36851 AGAACCTCTG GCTCTTTAAA GTTTCAGGG CACAATTGAG ATCCTTGAGG
 36901 TACAGTTCAT CCATGCAGAC CTAGCACCTG CTTTAGTAA GGGCTCTTGT
 36951 TACTCTTGT TCTTATCGGG TTCTTATGTT CAGCTCAGCT TCTGTCTTCC
 37001 TCAGAGAGAA GTGGTAGGTT CTGTTTTAGG CTTTCTTTT TTGGTGGTGG
 37051 TGGGAGGTGT CAAACCGCAT TATTGAGGG AGTGGGGGTG GTAAAGCAGT
 37101 GGTGAGGACG ATGAGAAGCG ACCTCTCTAG CCAGGCCAGG AGCTCACCTC
 37151 CCAGACCCCTG CCCTTCAGGC ACTGAAAAGT GTTTAGGCT TTCTGTGATG
 37201 GTTGGAGTTT ACTCTTAGT GCTGACAGTC ACTCATCCCC TGGAGAGGGG
 37251 TACTGAGCAT AATCACTGTG GGTATTCTTAT TTACTACCAG TTCTTCATCA
 37301 TTACCGAGAC TCATTCCATT TGGAAAATAA ACATTCCTC ATCTGTTCAT
 37351 GGTATATTAACTTACACTGCC TTTCACCTCAC ATGTTGATAA TAAACTGAAA

FIGURE 3-11

37401 AGATCAGCAT GATCTGGAG CCTAATGTGA TCTGGATCTT ATTACCATGT
 37451 ATGTTTTAT CGTCAGGTGC TGCTTTGGAC TCTGGCCAT TCCTCCACC
 37501 TGCTTCATC CTGTCGGGGT TGATCTCTGC CTGGTCCAT AGTCACCTTG
 37551 CTTTGGAGT TTATTTCTT CTCTAACCA CTCTTCCCTT CCCTGTCAA
 37601 TATAATTCTC TCATGAGCAA CTGTGCCTGA TAATCCCAGT GTATAGGCC
 37651 TAGCTCAGGT TGTTTAATG CTTGCAAGGA AGTCTCTCA GATTACTACA
 37701 GGGTAAAAGA ATCCATTCC TTTCAACCTC TCATTACTTA CTGAATCAAT
 37751 TATTATTTA CTGTGTAAT TCACATCCAT GTCAGGTAT GTGTTTAGTT
 37801 TACCTCTGAG ACTGTGGCTC CCTCTAGACA AGGGCTTTG TCTGGTATTA
 37851 GTCCACTTCC TCAGTGTCTA ATTTCATGAG GACAGAATCA GGGCAAGACC
 37901 TACTGGCTAA GACITGCTGC TGCCCTAGTT ATTTGGTTA CTGTTAACGC
 37951 CCTTGAGCCA GGAGGTGACA GTATCTTTG TGTTCCAAGT CAGATAACCA
 38001 GTAACAGTAA TATTCTGATG TAGGTCTAAG GGGCAATAGG AGCCTGAATC
 38051 TGAGCCCCCTT GGCAAGGGATG GTTTOCCCTGG GTTACTGGAT TTGAGTCTTT
 38101 GTCTTCGTA ATAGTAACCT CTGTGACCC TGGCTCAAGG AGTCTTTCT
 38151 AACCTAAATG CCTCTCTGAA GAAAGTGC TG ATATTCTAC GAAAAAAAAG
 38201 TAGGGTTTGT GTTATGTAC CATCTGGAG ACATTGGCTT TAATCCCTC
 38251 CCCTCTCTT TTCTTTAA AATTTCAAG AATCCCGAG ATTGAGGGTC
 38301 AATCTGGAT CAGAAGGGC AGAAAAGTCA GCGAGTCAGA GGTGAGAAAG
 38351 GGGTCTTGTG TTCCAGTTGC TCTACTTTAG AGGGCTTGAG GGCGCGATTA
 38401 GGAGCAAACCC AAATACTCTG AGGTCTCTAG AGAAGATTCG TCTAAATCCA
 38451 GGATGATTTC ATCATATGAC TTGAGATGGA GGGGTTCTTG ATTAGTAATG
 38501 GGCTTTTGA TTGGCAGGAA GTAGGTAAAC TGCAAGGCAAT AGGATGGCC
 38551 ATAGAAAATAT AGGGAACTCT ATGCTTCAA CTCTTGTGAA GTAGGACCA
 38601 AACCAAATTA TTGGGGGTTT ATTGGTGGCT AAGAAATTAA CTTTTAACT
 38651 TATAGTTAAA AAAAAAAAAC TTAAAGAACT TTATTAATT CTTOCCCAAT
 38701 AGAGTGTATT TTTTTTTT TTAAGAGACG GAGTCGGCT CTGTTGCTCA
 38751 GGCTGGAGTG CAGTGGTCA ATCATGGCA CGGCTCACTG CAGCCTGAC
 38801 CTCCCAAGGCT CAAGTGACCC TCCCACCTCA GCCTCTGAA GTAGCTAGGA
 38851 CTACAGGGT GCACCAACAC ACCCAGCTAA TTTTTGTATT TTTTGAGAG
 38901 ATGAGATTTT GTCATGTGCA CCAAGGATAGT CTCAACTC TGGGCTCGGG
 38951 CCATCTGCCC GCCTGGCT TCCAAAGTGC TGGGATTACA GGCATGAGAC
 39001 ACCATGCCCCA GCGAGAATGA TTTCCCTTG TTGAATTCTC AAAATTTAT
 39051 TCTGGCTTAG GTAAATTGAGT AGGAATGGCA GAGAGTAATA ATTTCAGTG
 39101 TAATCTTTAG CATTACATAA ACCTCTACAA ACATGAAGTA AAAAGTTCTT
 39151 TACAGACTT CTATGAGAA AATAAATGTT TATAGATCTG CTTATCAACT
 39201 GTTTGTTCTT CCTACCTCTG CATTTCATC TATTGATAAC TGTCAGAGTT
 39251 CAAGGTCACTG TAATTGTACA TTTTCTGGGA GTTTTCTCA CTGTTAATT
 39301 GTAAAGCTTT GAATCATTAA GTGCTGATGA CTACATGGCA CAATTCTTA
 39351 AAGACAGTCA TACCTTAAACC TTAGTACAGC TATAATGGGA CGGTGAAATA
 39401 CAACTAGGAA AGTATCTTAT TAAAGTATT TACATTTCAC TAATAAAATT
 39451 TATTTAAACC CTGAATTAGT GTTTTATTGT GTTTCGGAAT TCTCAGTAAC
 39501 ATCTCAGTAG ATCCGTGAAT CCTGCCAAA GACGTATTGT AATCCAAAGA
 39551 TCTTTCTGCA TCTATAATT ACCACACTAA AGCTCACATT ATCATTAAAA
 39601 GCAGCATTAT CATTAAATTG TAGACATTAA TTAGTTCATC TCCAGGCCTA
 39651 ATGGGAGTGG TTGGGAGTAA ACCTTTGTAG AAACAATAAT ATGTTTGAT
 39701 AAATGCTAT GGGCGTGGAG TGGTTATCAC TTACCTCTC ATGAAATTTC
 39751 TGGAAAGGTG ATCCGGAAAA CCAGGACACA TTTATGGTAA GATATAACAC
 39801 CTTACCTAA CGATTAAGGC TCATTGAAAA ACTCTGACTT AATGAGTTA
 39851 CCAAAAAACT GTTCTATCA CATCTCATCA AACCGCCCCCT GAAATTCCCT
 39901 TGCCCTGTAA AAATTTCT AGACAGTCTG AATAGAGGCC TGTAATT
 39951 TTGGATTCTT CTGTTGGTAA ATAATATCC TTACAACCTC TCCTTATTCT
 40001 TGAATATCCA TAAGAGTTA TATTATTAATCT GTATGTTTGT TATTAGGATT
 40051 CCTCTCAATT GTCTATATAAA AAATGTAAGG TCTGTTACT GCCTTAAACC
 40101 TTCTGGTGTAA TTCTTATATAA AAGTAACACC CTTAATTCTA ACTTGGCCAA
 40151 CAGGTAGGAT GGTATTATTA TTATCTCTAT TGTCAGATA AGGAAACTGA
 40201 GGCTCAGATT GACTAGATCA AACAGGAGTT TTCTGGAAAA CCTAGGACAC
 40251 AAGCTAAAT CTTTGAACCTC AAATACTGCT CTACACTGAA TTACAGTTAT
 40301 ATACTGATT GTGTTGTAA TTCTTAGAGA AGACAGACAT AGAAATTAGT
 40351 AACTTGAGTC AGTAGCGGCT TTGTTCAAC ACAGGCACAT GCATATT
 40401 TGGTATATGT TTATATCTGT GTAAATCTA TCATAATGT CAGATTATA
 40451 ATCGATAGTGC CCTCTTCTA AATTATAGT TGAAACCTCT GATAGGAATT
 40501 AGGAATTATC TTAAAGTCTT AGAATAATAA ATATTAAGAT TTGAGACT
 40551 GCTTAAACACA GTGTTCCAGG CTGGATTCTT TCCTTAGTTT TTTTTCCCT
 40601 AGTTTTTAC TTAGTTTTT TCCATGTAAAT GAATGAGGAG CCTTTGGGGT
 40651 TGGTGTGGG TTGAAAGGG CAGGTGACT TCACCAAGGAG GTGTTCTTG
 40701 GTATTTATGG ATCCCTCTTT TCACACTAAT CCTTTGATTA GCTTCCTT
 40751 ATAGTCATG CTGTACAGT TGCAAGCTGAA TGGTAAGTAGT GTAGAAATAT

FIGURE 3-12

10/506513

40801 GCATTGACTA ATGTTGAAC TATATCTAGGA GCGTCATATT CATGCTACTA
 40851 CTGAGCACTG TGACGCTAGGT GAAGTGTGAG ATTAAGAGC TTTATTTGCTT
 40901 ACCACGTTTC TTGTTGATCT AGTTAGAGTC ATGTGAGGCA GTCCATGACT
 40951 TTTAGGATGT TATAATATAA TCCACATAGT ACTTTATACT TTCAATTGG
 41001 TTTTATATA TTTTCCCTA CTATAAGCT GTCAAGCTA GTGAGATGAC
 41051 ATGGTTATTA ATATATTACA AATGAAGAAC TCTGACTTGG AGGTAGTATA
 41101 GCACTGTGGT TAATAATAGA AGTTCTTATA TTTTTATATG AATTATATAT
 41151 TATGAACCG ACCGAATAC TAGCTCTACC AATTACCTAG CTGAGTGATG
 41201 GTGCAACAACT TTAATCTCTC AAAGCCCTGG TTTTCTCATT GTAAAATGG
 41251 GGACCTTATA GGATTGTTGG GTAGCTTAA TGAGATAATA GTAGAATTA
 41301 AAAGTAAACGG CAAAAACCGC AATTACTTT GCACCAACCT GATATTTAGA
 41351 ACAGTGGAGG CATATAGTAG GCATTCATAA AATATTGGTA GTATTATTT
 41401 CAGAGGTAT TACTCATTTA ACTCAACAAA AATTGAGAGC CCTTTCTAT
 41451 ACGCTAGTCA TTGTTGCTAGG CATCAGGAGC ACAGGGCAA CCTGGTAGGG
 41501 TGCTTACTCT GATGGAATT ACATTTAGT GGAGAAATG GTAAATGAGT
 41551 CAACAAAGAT TTATGGAGT GACAAGGACT TTGAGGAAAG TAAAACGGGA
 41601 CAATGCTTGA GAAGGGTGCT AGTTGGGAAG TCCATCACAA CGAAGTGGTA
 41651 TTGATCTGA GACCTGAGTG ACCATAGCCA CATGAATACC TGGGGGAAATC
 41701 ACTCCCCAGG AGGAAACAGA AGGCACAGAAG CGGAAGGCA GGATCACAGG
 41751 CGGCACATT TATTGGTCA GTGTGGAGT AGAGGGACTG GATTGTGTAG
 41801 GTTTTGTAGG CCAGGGTAAAG GAGCTTGGAT TTCTCTGAG TGAGGATTT
 41851 TGAGCAGGGG AGTGTGTGT CTTATTTGG GCGGGCGCTA GGGCAGGTAC
 41901 TGTGAAGGAA ATAATGGTAT AGAAGAAATA TGTCTTCCT GCTAGAATCT
 41951 TATGTGACAT ACAACTAGTG GTGGCTGATC AGCAATTAGA ACTGCAGTGT
 42001 TCTTGTCTGT GΤΑCTCTAA TCTGATCATT GGATGATATT TATCACGTAT
 42051 TTTTGCAGCA GTCATCTCTA AAGTGGCATT ATGGTCTAG TTATCTATCA
 42101 TTGGATCTGT TTGCTCTAAC AGTCCCAGG GGCATGAAGG GTGGAAACAG
 42151 AGTAGAGGG AATGGGTGAA AAGGCTATT CTAAACACTA GACACAAAAT
 42201 AGGGATTAGG AAGTAGTGGG GTTGTAGGAG AAAAGCAAAA TCTCTTGTG
 42251 CATGGAGGG GACATTGTTG AAACCTGTGGC TTCTTGAGAT TACATGAGTG
 42301 AACCTGCGTG GACTGGGTG TCTTCCCTAT TCACCAAGCT GAATCCAGGC
 42351 CCAATCCAAG ATTACTGCTG CCTTTGCTCT GAGGCTTAG ACTGTTAGTA
 42401 GCTTTCTCG TCTCTACTGA GGCCAAAAGG GGCACTGATA CCCTGAATT
 42451 TTCTCTTAA AACAGGGTTT CATTTCCTTG GAAGTTGTT TCTTGAATC
 42501 TTTCTGTCAAG TTTAACTGTT ATCATCAATT GGTTAGCATT CTAATAATAA
 42551 TTATAATTAT AGTAAACATT TATTGAGTGC TTACCAAGAG CCAGTTCCAA
 42601 GCTTTTTTAT CTCCATTATT CTGCTACTTT CCTTCTCATT TTACAGATGA
 42651 GGAAATGAG GCACAGAGT GTTAATTAACT GTTGTGAGG TCCCGTAGCA
 42701 GGTCACTGTC GCGAGGGTTT AAACCTACAC TTAACCTCAC ACTAGAGACT
 42751 GTTTCTTAA TTATTTCTTC ACAATCATAT GTTAAATGAT TACTTATTGA
 42801 TTATTTAGTG GTCTGATAAG AAGAGGGAGC GGTGCTCTC TGTGGAGAA
 42851 GAAAGGCTGG CTGATCAAGA CACACTGGT GTTGTGAAGA AAAAATATAG
 42901 ATGTTAATTTC CATAACACCA CACTCTAACC ATTTCTACTG GACGAGTTCC
 42951 ACCTGTGTC CACTCGAAGT CGGATGCAGT AAGGAAGGCT TTTTATTGAG
 43001 GAGAGAACGA ATACCTCTGT ATTCAAAGA GAGTGTGTTG TTCTTATAG
 43051 AAGATGGAAG GGGGCTTGC AGTGACAGAT TATGATGATT ACCTCCTTAG
 43101 TGGTTTTTT TTATTCACAA GACTATAATA ATAATTATAA AAATTTGTAA
 43151 ATCAAGAAAA ATCTTTACCC CAACAAATTG TTTTATATT TTTCATATTIC
 43201 ATATTTTTC ATATTCATT TATTTCATCA TATTCAAAAA TAAAACAATT
 43251 TTCATATTCA TTCAATTGT TTATTTTC ATATTCAAAA ATAAAACAAT
 43301 TTTCATATTTC ATTCATATTG TTTTATTTT TCATATTTCATATTCAT
 43351 ATTTTTTCAT TTTTATACAC AGTTATAGAG TATCTACTTA TTTTTCATT
 43401 AACATTATGC TATAACAGGT TTAAAGTTA GGCAGTAAGT CTTTCCAGTG
 43451 AAAAGGAAAA GACTGAAACA TGAAAAGTTT ACAGGGCATT ACTAATTGAT
 43501 TGGATGTGTC CCTACAGGC AGCCCATGTC AGTTTTGGAG CTGGCCCTGG
 43551 AAGGAACAGC TTGTGATTG GACCTTGAG CAGTCTGTC GGCTTCCAAG
 43601 AAAGTGGCA AAGAAGGAAG GGGGGTTGGG GGCACAAAGTG GAAAAGTACA
 43651 GTGGTTGGAA ACTGATGTGA AACTATCAAG CTGGTTGAGT TCAGTGTAG
 43701 AAAATAGGAA AAACAAAACA ATTTCTACCT GATATGGTAC TTAAATTTGAG
 43751 GTTACGACTT CAGTGAATAG GCAATGCATT ATAATTTGTC AGAATTATCA
 43801 ATATTTGTT TTGTCAGTG GTTCTTATATT TAATAGTTAC ATGTTATAAA
 43851 GCCAGTTTA TCAGTGAAG AACAAAGTC TTGACAAATG CTATTTTGT
 43901 GATAAGCTG TTATTCCTGTA TTAAATTCA GTTAACTCA AAGTGGTTT
 43951 TAAGTTTAC ATTTGTATAA CTGTAGACTA GCCATATGGC ATTCAAAGGC
 44001 CTCCAAGATA TAACTTGAGA CACTCTTAGG ATGGAATCCC ATATTCAGAA
 44051 TCTTACTGA CAGCTCCCA TATCCAAATT GCCTTTCTC TCTGGGGCT
 44101 CTGGGTGTGA CAAGGGACAA CTTGAGTGA AGGCCACAGG ACAAAAGTAGA
 44151 GATGCTGTTA AATCTCAATG CAGAAGGCCT GAGACAACGT ATAGAGACAA

FIGURE 3-13

10/506513

44201 TTGTTTCTCT TTTCTCCTC ATAAAATAAG TAAATTCAA AGTGATTTT
 44251 TTTAATTTT TTGCTTGCAC ACATTGTGTT TAGTCTGATT GAGGTCTCATCT
 44301 TACACAACAG AATCCAAAAT CCTGAGAAAA TAATTTATAC AACTAGAATT
 44351 CAAAATTAG GTTTGCATT AAGTTCAAGC TATCATTCTCT TTAAGAAAAC
 44401 CTACACTGGA GTTACCAACT GGAATATTG GTTATGAGAC ACAGTCATCA
 44451 TGTAGAGTG TGAGTACACT TTCTAACACT TATTGTTG TGTTAAGAC
 44501 CTGCTCCTG CCACATTTA TCATAACAAA AAACAAGAGA CACATGTTAG
 44551 TACTGTAGCA TGATAGTC TGAGGAAATGT GTTCTAAACG AAATCCATC
 44601 ACAGTGGAGT CAACACAATA TTTCTAGGG AGAAGGTCTT CTCGTTAAC
 44651 TCATGTGAAG GCATTCTCT CTACTATGGG AACTGTTA TGTCCTCTCT
 44701 AGAAGACAGC TGAGATGGTC TTCAGTGAAT CTGTTCACTG ACATGTTGCT
 44751 AGTTCTTAA TGTTTACATG TAAACAGTGC TTAGAAGCAT CTTCCCCAA
 44801 GCTGTTCTT TTTGATGGA CTCCCCCTT TTGGGGAGT ATCAGTTGAA
 44851 TGAGCACTGT TGACTCTCTCA GCACTAGACA TTCTGTTATG TGTTGTTGGA
 44901 GCTTCTTGT GGCTTGGTAG CATTACCTCT GCATTACATG CTGAGCCTC
 44951 ACCAGGAGA AGGGCATTG ACTTCTGCTG CTACTTACCA GCACCTCTGT
 45001 TTCTCGAGT GTGTTACCT CCCACCCACT GGGCTTGGG CCTGGGTCGG
 45051 TTGGGCTATT ATCCATGCTC CCACCTGCCCC ATCTCTGCTC TGATATAATC
 45101 TACTAGGATA ATAAAGTAGC TTCTCCTAC CATAATGTT TTTAAATAGA
 45151 CATACAGAA TGTATAATGG TTAAGAGCAT GATCCAAACT GTGTCGATT
 45201 TTGAATCTG GCTGAGTTAC TAGCTATGTA ATCTTGAGAA AACTACTCAA
 45251 TCTCTCTGTG CCTTAATTTT CTTAGGTATA AAGCAGATAC TAATTATGCC
 45301 ATCATAGGGT AGGTATGAGG ATTAAATGAG TGAGTATTG TAAAACACTT
 45351 AAAACAGTGA CTGACTTGGG CTACCCCTT TGGGCCCCCT CCTTTGTAT
 45401 GGGAGCTCTG TTTTCACTT ATTAAATCTT GCAACCTCAC ACTCTTCCAG
 45451 TCTGTGTTG TATGGCTCA AGCTGAGCTT TCGCTGCTG TCCACACTG
 45501 CTGTTGCTG CCATCGCAGA CCCCOCGCTG ACTTCCACCC CTCTGGATCC
 45551 GGCAGGGTGT CCACTGCACC TCTGGTCCAG CGAGGTGGTG CCTTGGCG
 45601 CTCCCAATCG GGCTAGGGGG TTGCTTGTG TCCITGACGG GCTAAGTGCC
 45651 CTGGGTTCAT GCTATTGAG CTGAATAGAG CTGTAACACT CACTGTATGG
 45701 CCCAAGGTTT CATTCTTGG AATCTGTGAG GCGAAGAACCC CCAAGTCAGA
 45751 GAAGAAGAGG CTTGCCGCCA TCTTGGAAAGC AGCCGCCAC CATCTTGGG
 45801 GCTCTAAGAA CAAGGACCCCG CCGGTAACAT TTTGCCACC ATGAAGGGAC
 45851 TTCCAAGCG GTGAGTAATA TGGGACACT TTTGTTGCT GTTCTGCCCT
 45901 ATTCTTCATT GGAATTGGAG GAAAATACCG GGCACCTGTC AGCTGGTTAA
 45951 AAACAATTAG CATGGCCACC AGACTTAAGA CTCAAGGTGTG AGGCTGTC
 46001 GGGAAAGGCT GTCTAACAGC CCCCACCCCT TCTGGTTGG GAGGGTTGG
 46051 CTGTCGGAA CCAAGCTTCA CTTTCAGTTT TCTTGGGAA GCTGAGGGCC
 46101 GACTAGAGGC AGAAAGCTGT TGTCCTGAACT TCTTGGTGT AGCTGGTTGA
 46151 GATCATGGCG CAGCCAGAAG TCTCTACTCA ACAGTCAGCC ATGGCTGAC
 46201 CCTACCTTT CTTCTGACC TATAACCTCTT GGTCTGACC ACAACTTGCT
 46251 TGAAAGTGTG GCCCCAAAAT TCTCTTAACT CTCGAATCTA CTTCTCCTAA
 46301 TCCCTGCCTC CTAGGTACTA ATGGTCTAGA CCTCTATTTT CTCTAGCAAG
 46351 CTGTATCTCC AAAGGGATCT AAGGAAGCTC TATGCTGTTG CCTTAAGGCC
 46401 CTAGGCTCTG AACCCAGATA GTCTTGTCCC TGGTGTCCCC CCTAAATTAG
 46451 GCATACAGCT CTCAACATGG GCAGTTATGT AGGACCTGTT CCCCACCATC
 46501 CTTGCCAGGG TCCCCAGGTTT GTAAAGGGCT AGGAGAAGAG AGAGAGAGAG
 46551 AGAGACAGAG ACAGAGGGGA GAGAAAGAGA GAGAGACGAA GAGGGAGTC
 46601 AAGAGAAAAA GAAAGAGAAA GATAGAAGTA GTAAAGAAAA AATAGTGTG
 46651 CCTATTCTT TAAAAGCCAG AGTAAATTAA AAACCTATAA TTGATAATTG
 46701 AAGGCTCTT CCTGACCCCTG TAAACACTCA ATACCACTTT ATTGTCAGTG
 46751 TAAACAAGGG GTGAGCCCCAA AAACACTGAG ACCACTGACA ACCTATCAA
 46801 ATCCTATCAA AAATCCGTA AACCAACTGAA CGTGGATGGG CCAAGGCAT
 46851 TCAGTCGGTA GCGGCAACTG CTTTGCTAA AGTAAAAAA TAACCTTGA
 46901 GGAAACCTCA TTGTGAGTAC ACCTCACCG TTCAAAACTA TCTTAAGTC
 46951 AAAAAGCAAA AAGGTAACCT ACTAACTCGA AAATCTAAA ATATGGGCT
 47001 CTTCTGTTAG AATAAAGGTAA ACTTATTAAC CACTGAAAAT TCCCTTAACC
 47051 CAGCAGATTT CCTAACAGGG GATTTAAATC TTAATTACCA TACAAAGGTC
 47101 CGACAGATCT AGGGAGGAAT CCCTTCAGGA CAGGATGATA GATGGTCTCT
 47151 CCCAGGTAAAT TGAGGGAAAA AACCACAATG GGTATTAGT AATTTGATAGG
 47201 GAAAATCTTG TAGAAGCAGA GTAGGGAAAA TTGCTTAATA ATTGGCTGTC
 47251 TCAAACATGC GAGCTATTG CACTCAGCA AGCCTTAAAG TGTTTACAGA
 47301 ATCAAAAAAA CTCATCTCA ATCCTGACTC AAAAGGTTAC CTACACCCCTC
 47351 TCTGAAATGA ATTGCTAA GAACGTTGTT TATGGGAAT GCTCTTGT
 47401 GGGGCACTG GGTTGTTATG AAATACTCG GAACCCAGCC CAGCTCCAGG
 47451 ACTCAACCCCT GAGCAAAAAA GCAATGTTGG GCACTCTGGT AAAGGACCCAC
 47501 TAGAATCCAG CAGCCCTGGAC CCCTTCTTT GTGGTCAAGA AAGGAGGAA
 47551 AAGGGTGCA GGAACGTAC ATCAAGTGAAT GCAACTAATC TGATAAGCAG

FIGURE 3-14

47601 AGGTCCATGG GTGGTTACAC ACCCTGGAAA GGAATAAACCA TTAGGACCAT
 47651 AGAGAACGCT CTAGGACTAA TGCTCATTTG AAAATGACTA GGGGTGCTGG
 47701 CATCCCTATG TCCTTTTC AGATAGGAAA TGTTCCCCC AAGGCAAAA
 47751 TGCCCGTAAG ATATATTCTG GAGAATTGGG ACCAATTGTA CTCTCAGATG
 47801 CTAAGAAAGA AATGACTTAC ATTCCCTCTGC AGTACCACCT GGCCATGATG
 47851 TCCTCTCAA GGGGGAGAAA CCTGGGCTCC TGAGGAAAGT ATAAATTATA
 47901 ACACCATCTT ACAACTAGAC CTCTTTGTA GAAAAGAAGG CAAATGGAGT
 47951 GAAGTGCAT ATGTACAAAC TTTCCTTCA TTAAGAGACA ACTTGCAATT
 48001 ATGAAAAAGA TATGTTTATG GCCCTACAGG AAGCCCTCAG AGTCTACCTC
 48051 CCTAACCTGA TGTCCTTCTG ACTCTTCCC CAACTAATAA GGACCCCT
 48101 TTCAACCCAA ACAGTCCAAA AGGACATAGA CAAAGGAGTA AACATGAAC
 48151 CAAAGAGTGC CAATATTCCC TGGTTATGCA CCCTCCAAGC GGTGGGAGAA
 48201 GAATTGGCC CAGCCAGAGT GCATGTACCT TTTCCTCTCT CACACTGAA
 48251 GCAAATTAAA ATAGACCTAG GTAAATTCTC AGATAACCT GATGGCTATA
 48301 TTGATGTTT ACAAGGATTA GGACAATCTC TTGATCTGAC ATGGAGAGAT
 48351 ATAATATTAC TGCTAAATCA GACGCTAACCC TCAAATGAGA GAAGTGCCTGC
 48401 CATAACTGGA GCGCGAGAGT TTGGCAATTCT CTGGTATCTC AGTCAGGTCA
 48451 ATGATAGGT GACAACTGGG GAAAGAGAAC GATTCCCCAC AGGGCAGCAG
 48501 GCAGTCCCA GTGTAGCTCC TCATTGGAC ACAGAATCAG AAGATGGAGA
 48551 TTGGTCCCGC ACACATTTCG TAACCTGGCT GCTAGAAGGA CTAAGGAAAA
 48601 CTAGGAAGAA GCTATGAAT TATTCAATGA TGTCACAT TAAACAGGGG
 48651 AAGAAAAGA ATCCTACCCAC CTTTCTGGAG AGACTAAGGG AGGCATTGAC
 48701 AAAGCATATC TCTCTGTACAC CTGACTCTAT TGAGGCCAA CTAACTTAA
 48751 AGGAAAAGTT TATCACTCAG TCAGCTGCAG ATATTAGAAA AAAACTTCCA
 48801 AAGTCGGCT TAGGCCCGGA GCAAAAGTTA GAAACCTAC TGAACCTTGGC
 48851 AACCTGGTT TTTTATAATA GAGATCAGGA GGAGCAGGCA GAATGGGACA
 48901 AATGGGATAA AAAAAGGAAAG GCCACTGCCT TAGTCATGGC CCTCAGGCCAA
 48951 GCGGACTTTG GAGGCTCTGG AAAAGGGAAA AGCTGGCAA ATAGAATGCC
 49001 TAATAGGCT TGCTTCCAGT GCGGTCTCAA GGACACCTTA AAAAAGATTA
 49051 TCCAATAGA AATAAGGCCAC TCCCTTGTC ATGCCCTTA TATCAAGGGG
 49101 ATCACTGAA GGCCCACTGC CCCAGGGAC GTAGGTCTC TGAGTCAGAA
 49151 GCCACTAACCC AGATGATCCA GCAGCAGGAC TGAGGGTGCC TGAGGCCAA
 49201 ACCAGCCCAT GCCATCACCC TCACAGAGCC CTGGGTATGC TTGACCATTTG
 49251 AGGGCCAGGA GGCTAACTGT CTCTGGACA CTGGTGTGGC CTTCTCAGTC
 49301 TTACTCTCCT GTCCGGACA ACTGGCCTCC ATATCTGTCA CTATCCCAGG
 49351 ACAGCCAGTC ACTAGATACT TCTCCCAAGCC ACTAAAGTTGT GACTGGGAA
 49401 CTTTACTGTT TICACATGCT TTTCTAATG TACCTGAAAG CCCCCACTCCC
 49451 TTGTTAGGGA GAGACATTCT AGCAAAAGCA GGGCCATTAA TACACCTGAA
 49501 CATAGGAGAA GGAACACCCA TTGTTTGTC CCTGCTGGAG GAAGGAATTAA
 49551 ATCCCTGAAGT CTGGCAACA GAAGGACAAT ACGGATGAGC AAAAGAATGCC
 49601 CATCTTGTC AAGTTAAACT AAAGGATTCT GCTCTCTTTC CCTACCAAAG
 49651 GCAGTACCCC CTTAGACCGG AGGCCCCACCA AGGACTCCAA AAGATTGTTA
 49701 AGGACCTAAA AGCCCCAGGC CTAGTAAAG CATGAGTAG CCCCTGCAGT
 49751 ACTCCAACCTT TAAGGATACA GAAACCCAAAC AGACAGTGG GGTAGTGCA
 49801 AGATCTCAGG ATTATCAATG AGGCCATTGT CCCTCTATAAC CCAGCTGTAC
 49851 CTAATCTTA TATCCCGCTT TCCCCAACAC TAGAGGAAGC AAAGTGGTTT
 49901 ACAGCTCTGG ACCTTAAGGA TGCCCTTTTC TGCACTCTA TACATGCTGA
 49951 CTCTCAATTCT TTGTTTGCTT TTGAAGATCC TTGCAACCCA ACATCTAAC
 50001 TCACCTGGAC TGTTTACCC CAAGGATTCA GGGATAGCCC CCATCTATTT
 50051 GGCCAGGCAT TAGCCCCAAGA CTTGAGCCAG TTCTCATAACC TGATATTCT
 50101 TGTCCTTTGG TATGGGGATG ATTTACTTTT AGCCCCCGT TCAGAAACCT
 50151 TGTGCCATCA AGCCACCCAA GTGCTTTAA ATTTCTCGC CACCTGTGGC
 50201 TACAAGGTTT CAAACACCAA GGCTCAGCTC TGCTCACAGC AGAGGGCTAT
 50251 TTATCCCTAA ATACTTAGGG CTAAAATTAT CCAAAGGCAC CAGGGCCCTC
 50301 AGTGAGGAAT GTATCCAGGC TATACTGGCT TATCCTTATC CCCCCACCT
 50351 AAAACCAACTA AGAACGGTCC TTGGCATAAT AGCCATACCA GGCATACAG
 50401 GTTTCTGCTG AATATGGATT CCCAAGTAGG GCAAAATAGC CAGACCTTAA
 50451 TATACACTAA TTAAGGAAAC TCAGAAAGCC AATACCCATT TAGTAAGATG
 50501 GACACCTGAA GCAGAGGCAG CTTTCCAGGC CGTAAAGAAC ACCCTAACCC
 50551 AAGCCCCAGT GTTAAGCTTG CCAGCGGGGC AAGACTTTT TTTCTATGTC
 50601 ACAGAAAAAA TAGGAATAGC TCTAGGAAGT CTTACACAGG TCCGAGGGAC
 50651 CAGCTTGCAA CCCATGGCAT ACCTGAGTAA GGAAATTGAT GTAGTGGCAA
 50701 AGGGTTGGCC TCATTGTTA CGGGTAGTGG CGGGCAGTAGC AGTCTTAGTA
 50751 TCTGAAGCAG TTAAAATAAT ACAAGGAAGA GATCTTACTG TGTGAACCTC
 50801 TCATGATGTT AACCGTACAC TCACTGCTAA AGAAGACTGG TGGCTGTAG
 50851 ACAACTGTTT GCTTAAATAT CAGGCTCTAT TACTTGAAGG GCCAGTGTG
 50901 TGACTGCGCA CTTGTGCAAC TCTTAACCCA GCGACATTTC TTCCAGACAA
 50951 TGAAGAAAAG ATAGAACAGA ACTGTCAACA AGTAATTGCT CAAACCTACG

FIGURE 3-15

10/506513

51001 CGGCTTGAGG GGACCTTCTA GTGGTTCCCT TGACTGATCC CAAACCTCAAC
 51051 TTGTATACTG ATGAAAAGTTTC CTGGTAGAA AAAGGACTTC GAAAAGCAGA
 51101 GTGTGAGTG GTCTAGTATA ATGGAATACT TGAAAGTAAT CCTCTGACTC
 51151 CAGGAACCTAG TGCTCAGCTG GCAGAACTAA TAGCCCTCAC TCAGGCCTA
 51201 GAATTAGGAG AAGGAAAAAAG GGCAAATATA TATACAGACT CTAAGTATGC
 51251 TTACCTAGTC CTCCTAGCTC ACGCAGCAAT ATGGAGAGAA AGGAAATTCC
 51301 TAACTTCTGA GGGAAACCCCT ATCAAACATC AGGAACCAT TAAGAAACTA
 51351 TTATTGGCTG CACAGAAATC TAAAGAAGTG GCAGTCTTAC ACTGCTGTAA
 51401 GAAAGGACAG AGAAAATAAA GGGAAACGCC GAGTGGATAT TGAAGCCGAA
 51451 AGAGCCACAA GGCGGGACCC TCCATTAGAA ATGCTTATAG AAGAACCGCT
 51501 AGTATGGGT AATCCCCCTCC AAGAAACCAA GCCCCAGTAC TCAGAAGAAG
 51551 AAATAGAATG GAAAACCTCA TGAGGACGTA GTTCTCTCT CAGGATGGCT
 51601 AGCCACAAA GAAGGAAAAA TACTTTTGCC TGCAAGCTAAC CAATGGAAAT
 51651 TACTTAAAC CCTTCACCTA GGCATTGATA GCACCCATCA GATGGCCAAA
 51701 TCATTATTTA CTGGACCAGG CTTTTCAAA ACTATGAAGC AGATAGTCAG
 51751 AGCCTGTGAA GTGTGCCAAA AAATAATCCC CTGCACTTCA GGCATGCAAT
 51801 TTCAATCCC GAATCTTAA CCTCTCTTGT AAGTTTGCTT CTTACAGAAAT
 51851 TGAAGCTGTA AAAGCTACAAA TGGTTCTTCA AATGGATCCC CAGATGCACT
 51901 CTATGACTCA AATCTACCGC GGACCCCTGG ACCGGCCTGC TAGTCCATGC
 51951 TTGGATGTTG ATGATATCAA AGGCACCCCT CCCGAGGAAA TCTCAAGTGC
 52001 ATGACCCCTA GTTGACCCAG TTCAGCAGGA AGCAGTTAGA GGGGCGTTG
 52051 GCCAACCTCC CCAATAGTAC TTGGGTTTTC CTGTTGAGAG GGTTTGTGTA
 52101 GAGACAGGAC TAGCTGGATT TCTTAGGGCCG ACTAAGAAC CCTAAGCCTA
 52151 GCTGGGAAGG TGACTGCATC CACCTTTAAA CACGGGGCTT GCAACGTAGC
 52201 TCACACCGA CCAATGAGGT AGTAAAGAGA GTCACTAAA ATGCTAATTA
 52251 GGCAAAACAA GGAAGTAAAG AAATAGCCAA TCATCTATCA CCTGAGAGCA
 52301 CAGGGGGAGG GACAATGATC AGGATATAAA CCCAGGGCTT CTAGCCGGCA
 52351 ACGGTACCC TCTTGGTA CCCTCCCTT GTATGGAGC TCTGTTTCA
 52401 CTCTTAAAC TCTTGGAACT GCACAAAAAC CAAACCAAAAC CAACCAAAAC
 52451 AAACAAAAAA ACAGTGACTG ACTTATGGTA AACATTATAT AAGCATAAAAG
 52501 TAAACCAAAT ACTTTTTTC TAATTATAAA AGTCTTACAC TAACATTGCA
 52551 GAAAACCTGA GGAATTCAAG AAAGTTATTA CTTAGTAAGA GTTGGATGA
 52601 ATAAATAAGT GGGTAGTTAG GATGGCAGGC ATGTGTTTTA GGCAGAGAGA
 52651 TACAAGATAA AGAACTAAAA CTAGAATCTG GTCTTGAAC CCTGGGCTG
 52701 ATTGCTTAT TCATCATGAT GATTTGCCTA TTTTCTCAAT TTCTAAATCA
 52751 TTCTCTGCT GTTGACAAAG CAATAAATTG TTATTTGTA TAAGTGAATC
 52801 TTCAAGAAC TGGCTTGTAG CCAGCTCTAC AACTAACCCAG CTCTGTGGC
 52851 CTTGGAGAA TTCTTAAATA TTGTAAACC TCAGCTTTC TACCAAGTGA
 52901 ATGAAGTTAG TCTCCCTGT CCTGCAGGGT TGCTGCAAGG ATTTAACAAAC
 52951 ATGTATATGT ACAAAACCACT TAGTCTGTG CTTGGCTAT TTGGTGTCTT
 53001 TTTTTTTCT TTTTTTTAAG ACAGGGCTT GCTTGAATCT TGCTGAGGCT
 53051 GGATTCAAAC TCCGGGCTC AAGTGTCTC CCTGCCCTCAG CCTTCCAAGT
 53101 AGCTGGGACT ACAGGCTGC ACCACTGTGC CTGGTGGCAG TGCTGTTGA
 53151 ATGTTCTTTT TCTCTAGTC CTTCTAGCT CTTCTGACAG TTTTGGGCT
 53201 TATGTATATA AGAAGGACTT GGTTGCCCTA GGGAGAGAGG ATGCACTAGA
 53251 GTTACATAGC TCACTCTCA CA TCTCCAAAAA GCTGAATTCA TAAGTAAACCA
 53301 AAGTGAGCAT TTCACTGAACTA CTTTACACAA AGTCTAGAAT ATTATGGTG
 53351 TCCATCAGGC TCACTACTG TGACCTCTG AGATACTTTT CCTCTCCAT
 53401 TCCCTTCTCT TCTCCCTGT GGCTTTTTTT TTTCTCTTC TTCTTTTTT
 53451 TTTTTTTTCA CTGTGAAAAA CAACCTATAT ACAGAATAGT ACAAAACAT
 53501 ACCTGTATAG TTGAAGAGT AATTATTAAC AGTCTTATTA AGAAACAAATG
 53551 CTCCATCCAT GTTACTGCAA AAGACATGAC CTTATCTTCTT TTCTCTTAA
 53601 TTTTTTTCTT TTCTCTCTT TATTTTGCC CTTTTCTAGA TCTAGACCTG
 53651 CAGAGATCTT GTTCTTTTT TGAGACAGCA TCTGCTCTG TCACCCAGGCT
 53701 GGAGTCTAGT GGCGTGTACTT CGGCTCTAGC CACCCCTCTGC CTCTGGGTT
 53751 CAAGTGATTG CCGCTGCTCA GCGCTCTGAG TAGCTGGGAC TACAGGGCG
 53801 TGCCACCAAA TOCAGCTAT TTTTTTATTT TTAGTAGAGA CTGGGTTCA
 53851 TCATGTTGGC CAGGATGGTC TCAATCTT GACCTGGTGA TCTGCTGCCC
 53901 TCGGGCCCCCA AAAGTGCTGG AATTACAGGC ATGAGGCCACC AGGCCCCAGCC
 53951 GATCTTGTTC TTCTTATGA CTGTGAGTA TTCCATGGTA TATATGTACC
 54001 ACATTTCTT TATGCTTCTCT ATCATTGATG GGCATCTAGG TTGATTCCT
 54051 GTCTGCTATT GTGAACAGTG CTGCACTGAA CATTCACTG CATGTTGCTT
 54101 TGTGGTAGAC TGCTTATAT TCCCTCTGGT ATATGCTAG TAATAGGATT
 54151 GCTGGATTGA ATGGTAGTTC TTCTTTAGC TCTTTGAGGA TACTGCTTTC
 54201 CACAATGGTT GAACTAACTT AACTCATAC AGTATATAAG CATTCTTTT
 54251 TCTCTACAAAC CTGGCCAGCA TCTGTTACTT TTGACTTAT AGGTGGGAGC
 54301 TAAATGATAA GAACTTATGA ATGAAAGAA GGAAACAGAC ACTGGGATCT
 54351 ACTTGAGTGG GAAGAGTGGG AAGAGGGAGA GGAGCAAAA AGATAACTCT

FIGURE 3-16

54401 TGGTTACTAA GCTTAATACT TGGACAATGT AATAATATGT ACAACAAACC
 54451 CCTGTGACAC ATGTTTATCT ATGTAACAAA CCTTCACATG TACCCCTAAA
 54501 CCTAATTTT TTAAAAGAA ACAGAACGCC AGCCAGGCAT AGAGGCTAAT
 54551 TGCTCTAA CCCAGCACTT TGGGAGGGTG AGATGGGAG ATCACTTGAG
 54601 CCCAGGAGTT TAAGGCCAGC CCAGGCAACA TAGCAGAAC CCATCTCTTC
 54651 AAAAGTACA AAAATTAGCT GGGCATGGTG GTGTGACCT GTAGTCCCAG
 54701 CCCCTGGGA GACTGAGCTG GGAGGATGGC TTGAGCCCCAG GAGGTCAAGG
 54751 CTGCACTGAG CTGTGATCAT GCACTGAC TOCACCTGG GCGACACAGC
 54801 AAGACCTGT CTCCAAAAAA AAAAGAAAAGAAT GTTACCAAGCC
 54851 CAACTGACT TCTTCACTCC CCCACCACTC TAATGAAGTC ATCACTAAC
 54901 CACTCTAAA GTACTCACAT ACCCTATGTC TATGGAGGT TGTCAGTGG
 54951 GGCTAAGGT TGCCAGTGGG GGCTTATGTA CCTTATGTC AAATATTTAA
 55001 AGTTATTTAA TTAAAAAACC ATTAAAATAT GCTTCTTACCC TTGACAAACC
 55051 TTTATAACAA AATTAGAAAA TGTTTAATGT TATGGCATTAA ATAATTGAA
 55101 AGCAAAATAT CAAAGATGAT AGAATTAAAT TAATTATTTT ATTATTTT
 55151 ATTTGAGAGA GGGCTTTCT GTGTCAACCA GGCCTGGAGTG CAGTGATGCA
 55201 ATCATGGTC ACTGCAACCT CAACCTCCCG GGCCTCAGTG ATCCCTCCCG
 55251 CTCAGCCTCC CAAGTGGTTG GGACTACAGA CATGTGCCAC CAATCCAGC
 55301 TAATTTTAA ATGGTTTTA ATAGAGGTAA GGGTCTCACT ATGTTGCCAA
 55351 GCCCACTCTC GAATTCAGG GGCTCAAGGG ATCCCTTTCG CTTGTCTCC
 55401 CAGAGTCTC GGATTTAAGT TGGGAGGCAC TATAACCCACC CAACATAATT
 55451 CAATTATTTA ATATTTCAAA TGTTTAGTA TTCTTTGAT AGGGATGTGA
 55501 TGTTGGGTG AATAATAAAG TAAATCAAAG ACATATATTG GAAAATTATG
 55551 TAGTTATTCT AAAAATTAA TTATTTAATC TTATTTAGC AAAATCAGTG
 55601 TGTTAGATA ATCAAGATAT TTTGGTATTG TAGTAACAAG ATCTAGTCAC
 55651 AGTAATGATG TAAAGATTAA AAAAATAAAAT ATAATAGGA CGAGTATAAA
 55701 CAAGTGAAT TAAATTTAA ATGCAATAC CAGCTGGTG CGATGCCCTCA
 55751 CGCCTGTAAT CCCAGCACTT TGGGAGGCCA AGGCAGGGG ATCACCTGGG
 55801 GTCAAGGAGT CAAGACCCAGC CTGACCAACA TGAAAACACC CCATCTCTCC
 55851 CAAAATACA AAATAAGTTG GGTGTTGGG TGACATCCCTG TAATCCCAGC
 55901 TACTCGGGAG GGGGAGGCAG GAGAATCACT TGAAACAGGG AGGCAGAGGT
 55951 TGTGATGAGC CGAGATCACA CCATTGCACT CCAGTTGGG CAACAAGGGC
 56001 AAAACTCTGT CTCAAAACAA AAAAGAAACA AAAAACACAG TACCATTTAC
 56051 ATTAGCACCC CTCAAAATGA AATACTTATTG TATAATCCA GCAAAATAGG
 56101 TATAAGAGT ATATAAGTAA AACTATAAAG CTCTGATGAA AGAAATAAAA
 56151 GAACCAAATA ATGGACAGA TATTCATGTC TCATGGATAG GAAGACTCAG
 56201 TAATGTCAG ATGTCAGTCC TTTTCATCTT TATCTATAGA TTCACTACAC
 56251 TTCAATCAA AATCCCGCT AGTTTTTG TGATATTG CAAACTGATT
 56301 CTAAGTTA TGTCGACAGG CAAAAGACCC AAAATAGGTG ACATGCTATT
 56351 GAAGCAGAAT AAAGTTAAAG TCTCTACTTC TTCTTCATAA TCATTTCTT
 56401 CAATATCAA TCAACTCATT TTCTTCATAA TCAAGTCAC TGAGACTGA
 56451 CAGTGTCTTA CTTCAGACT TACTGTAAG CTACAGTAAT CAGAACAGTA
 56501 TGGTATTGGT GAAAAGATAG ACAAAACAGAT CGATGGAACA GAATAGAGAG
 56551 CCCAGAAATA GACCCAGACA AATAACAGTTA ATCTTTGACA AAGGGAGCAA
 56601 GGCATAGAA TGGAGGAAAG ATACCCCTTT CAACAAATGC TGTTGGAATA
 56651 ACTGGATGTC CACATGTAAG AAAATGAATC TAGACACAGA CCTTACACCC
 56701 TTCAAAAAAA ATGGACACAAA ATGGATCAGC AACCTAGACA TGAAACACAA
 56751 AACTATACAA ATTTCTGCTC TGTTGAAAGAC AATGTCAGA GAATGAGAAG
 56801 ACTGGAAAAA TATTTGCAAA AGACACATCT GATAATGAT TCTTATCTAA
 56851 AATATATAGG AACTCTTTAA ACTGAACAAAT AAAAAGAAA CCTGATTTA
 56901 AAATGTGCCA AACACTCTAA TAGATATCTC ATCAAAGAAG ATATATAGAT
 56951 GGCAAAATAAG CATATGCAAA GATGCTCCAC ATCATAGGTC ATCAAGAAAA
 57001 TGCAAAATTA AATGATGAGA TTCTACTACA CACTTATTAG AATGGCCAAA
 57051 ATCCAAAACA CTGACAAACAC CAAGTGTGG TGAGGATGTG GGACAAACAGG
 57101 AACTTCATT TATTCGTTGG GGGATGCAA AATGGTATAG CCACCTTGG
 57151 AGACAGTTTG CAGTTCTTA CAAATTAAA CACACTCATC ATATGATCCA
 57201 ACAATTGAGC TCTTTGATAT TTACCCAAAG GAGTTGAAAAA TTATATCTCA
 57251 CACAGAAACC TGACACATAGT TGCTTACAGC AGCTTCTTC ATAATTCGCA
 57301 AAACCTTGAA GCAACCAAGA TGCTCTCAA TAGTTAAATG AATAAAATAAA
 57351 CTGTAGCATA TCCAGAAATG GAGTACTCG TGCTAAAAAG GAATGAGGTA
 57401 TCAAGCTATG AAAAGACATG GAGGAACCTT TATTTTTTAA TTTTTTTAGA
 57451 GACAGGGTCT TGCTCTGTCA TCCAGGCTGG AATGAGTGG CACAATTATG
 57501 GCTCACTGTT GCCTTGACCT CCTGGGCTTG AGCTCTCTTC CTGCTCAGC
 57551 CTCCCAAGTA GCTGGGACTA CAGGTGCAATG TCACCAACCC TGGCTAATT
 57601 TTTTTTTGAA GAGATGGGT TTGCTGTGT TGCCCAAGGCT GGTTTTGAAAC
 57651 TCTGGGCTC AAGTGTCTT CCTGCTCTAG CCTCCCCGAAG TGCTGGGATT
 57701 ATAAGTGTGA GCACTATGCA CTGACTTTT TTAAATTTA TTTTTCTTCT
 57751 AGAGACAAGG CCTTGTCTT TATTGCCCCAG GCTGGAGTGT AGTGTGAG

57801 TCATAGCTCA CTGTGGCTC AAGATCCTGG GCTCAAGTAG GAGCCCAGCT
 57851 AATTTTTTTT AAAATTTTTG TAGAGATGGA GCCTTGCAAT GTGGCCCCATG
 57901 CTATGGAGGA AACCTAAATG CATATTTCTA AGTGAAGAAG CCAGTCTGAA
 57951 AATGTTATAT ACCATGGGAT TTCAACTATA AGACATTCTG GAAATGGCAA
 58001 AACGAAGGCA ACAATAAAA GATGAATTGT CAGGGAGTTG GTCAAGGGAG
 58051 AATGAATAGG TGGAGTACAG AAGATTTTA GGGCAAGTAA ATGTCCTCTGA
 58101 TACAGTAATG GTGGACACAC GTTGTATATT TGTCCTAACATC CATAGATTCT
 58151 ATAATACCAA CAGTGAACCT TAATATAAC TATGACTTT GGGGCTGGGC
 58201 ATGGTGACTC ATGTCGTAA TCCCAACAT TTGGGAGGTC AAGATGGGAG
 58251 GATCACCTGA GCCAGGAGT TTGAAACAG CCTGGTCAGC ATTGTGAGGC
 58301 CCTATCTCTA CAAAATAAG GAAACCATGG ACTTTGGATT ATAATGATGT
 58351 TTCAGTGTAG GTTCCCTAGT TATAACAAT GTACTACTCT GTGGGGGGAT
 58401 GTTTATAATA AAGGAGGAA TGCAATGTGTT GGGGCAAGGAG GTATACCGAGA
 58451 AATCTGTTA CCTTCTCTA AATTTACTG TGAATCCAAA ACTGCTCTTA
 58501 AAAAAAAAGG TCTTAAAAAA TAAAATTATA TTTGAGGGAA AATATTTGAA
 58551 TTATTATTAT TATTTTCTTT TTGAGAOGGA GTCTCTCTCT GTCCCCCAGG
 58601 CTGGAGTGC GTGGCAACGAT TTGGGCTCAC TGCAAGCTCT GCCTCCCCGGG
 58651 TTCAAGCCAT TCTCTCTGCT CAGGCTCCT AGTAGCTGG ACTACAGGCG
 58701 CACGCTGCTA TGCCCCGCTA ATTTTTGTA TTTTTAGTAG AGATGGGGTT
 58751 TCACCGTGT AGCCAGGATG GTCTCGATCT CCTGACCTCG TGATCTGCC
 58801 GCCTCAGCCT CCCCCAGTC TGGGATTACA GGCATGAGCC ACGCGGCGCTG
 58851 GCCTATTGTA ATGATTTTA TCAAAGATGT AAATTTAAAC AAATGTAAAA
 58901 ATAAAAAAACA AATCACTGTC TGATTCTATT TGTATAAAAT TCTAGAAAAAT
 58951 GCAAACAAAC TTATAATGGC AAACACTCT ATAGATCAGC AGTTGGCTGG
 59001 AGGCAAGAGG GAAGAATTGC AGTGAGGTAT GATAAAACTT TTGGGTAAT
 59051 AAATATATTTC ATTATCTTGA TTGCACTGTGTT GTTGGCACAG GTACATCCAT
 59101 ATGTCAGAT TCTCTGTGA ATACTTTATG TAGTTTATTG CATAACAAATT
 59151 CTATAAAATT AAAATCTA AAATTTTGTG TGTTTTAAA ACATTCTTTC
 59201 TTCTCTTTT CCTGAGACGG AGTCTCCCTG TATCACTCTAG ACTGGAGTGC
 59251 TGATTGCAGC CTTGACCTCC TAGGCTCAAG TGATCCTCCA GCCTCAGCTT
 59301 CCTAAGTAGC TGGTACCCACA CAGGGCGCATG CCACACACCC CATATAATT
 59351 TAAATTAGT TTTTGTAGAA ATAGGGCTCTT GCATGTGTC CCAGGCTGGT
 59401 CTTGAACCTCC TGGGCTCAAG CAATCCCTCA TCTTGGCTCTC CAAAGTGCT
 59451 GAAATTACAG GTGTGAGCC CTGCACCTGG CCATCTTAAT TTTTAATATT
 59501 TAAAAGAAAA GTAAGGGCA GACACTGTGG CTCTCACCTG TAATCCCAGC
 59551 ATAAGACCG CCTGGGTAAC ATGGCAAGAC CCCATCTCTA TCAAAAATTG
 59601 AAAATTAAC TGGGCATGGT GGTGGCCTGT GGTCCCCAGCT ACTCAGGAGG
 59651 CTGTAGCTGG AGGATCACT GAGCCTAGCA CGTTGAGGCT GCAATAAGCC
 59701 ATGTTGCAT CACTGCACTC CAGCTTAGAT GAGAGAGTGA GACCCCTGCT
 59751 CAAAATAAT AGATAGATAA TATATGCTGT AGTTTTAAA ATATATTATT
 59801 AAGATAAAAA GCAAGCCAAG ACAATTAAGT GGGGGAAGAA TAGTTTTCC
 59851 AACAAATGGT GCTGGAACAA CTGCATAGCC ACAGAAAAAA GAATGAAGTT
 59901 AGATCCCCCTA CCTCACACCA TATAAAAAAA TAACTCAAAA TTGATTAAG
 59951 ACCTAAGTAT AAGCTGAGAC AAGAAGATTA CTTGAGGCTT GGAGTTCAAG
 60001 ACCAGCTCTGG GCAACATATT GAGACCTCTGT CTCTTTAAAAA AGAAAAAAA
 60051 TCAGGGGGGC ATGGCAGTGT GTACCTGTAT TCTTAGCTAC TCAGAAGGCT
 60101 GAGGGCAGAG GATTGCTGTA GCCCAGGATT TAGAGGCTGC AGTGAAGCTAT
 60151 GATTGCACCA CTGTACTCCA GCCTGGGTGA CAGAGTGAGA CCTTGTCTGC
 60201 TCCACCCCTC CTCCACAAAG TGAAAGGTA TAAATGTTTG TGGCTTGG
 60251 TTAGGCAATG GTTTTTAAAAA TATGACATTA AAAGCACAAA CAACAACAAA
 60301 ATAGATTAAT TGGACTTCAT CAAAATTAAA ACCTCTGTGC TTCAAAGGGC
 60351 ACACCAAGAA AGTGAAGAAGA GAATCCACAC AATGGGAGAT AATTTTTG
 60401 AAATCATGTA TTTTACAAGA CTGGTGTCCA GAATATATAA AGAACACTTG
 60451 CAACTCAGCA ATAAAAAGAC AAGTAACACA ATTTTTAAAAT GTTGAAGGA
 60501 TTTGAATAGA CATTCTCTCA AAGAAGACAT ATAATCACC AATGAGCATA
 60551 TGAAATGTA CTCAACCTCA TTGGTCATTA GAGAAATGCA AATAGAAGTC
 60601 ACACCCATTA GGATGGCTAA AATAAAAAAA GATGAAACAT AACAAATGTT
 60651 GGCAAGTATG TGGAAAAATT AGAACCCCTCA TACACTGTGG ATGGGAATGT
 60701 AAAATGGTGC AGACACTTTG GAAAGTTGGC TATTCCTCAG AGATTTACCA
 60751 CATGGCACAG CAATTCTACT TTAGGTGTA TACCCAAGAC ATTAAAAAG
 60801 ATATATACAG GCGGGGGCGG GTGGCTCAAG CCTGTAATCC CAGCACTTTG
 60851 GCCAAGGTGG GTGGATCACG AGGTCAAGGAG ATCGAGACCA TCTTGGCTAA
 60901 TACAGTAAAA CCCATCTCTT ACTAAAAATA CAAAATTA GCTGGGGGTG
 60951 GTGGGGGGGC GCCTGTAGTC CCAGCTACTC GGGAGGCTGA GGCAGGAGAA
 61001 TGTGTGAAAC CGGGCAGGCG GGGCTTGAG TGAGGCGAGA TTGGCCTCACT
 61051 GCACTCCAGC CTGGGCAACA GAGCGAGACT CGGTCTCAAA AAAAAAAAAG
 61101 ATATATACAC AGAAAAAACTT GTACATAGAT GTTCATAGTA GTATTCCAAT
 61151 AAACATGCCCTC ATCAGTAGAT GAATGGATAA GCAAAACGTG GTGTATTAAT

FIGURE 3-18

61201 AAATGAAATA TTATCCAGCC ACAAAAAGCA ATGAAGTACT GATACATGAT
 61251 CCAATATGGA TGACCTTGA AAACTATACT AAATGAAAGA AACCGAAC
 61301 AAAAGGCCAC ATAGTACATG ATTACATTG TATAAAATGT CCAGAATTAG
 61351 CAATTCCATA AAGACAGAAA GTAGATTAGT AGTTGCCAAG GGCTGAGGG
 61401 AGGAGGAATG GGAGTGACTG CTAATGGGT CAGGGTTTCT TTTTGGGGTG
 61451 AGAAAAGTGT TCTGGATTAA CATAATGATG ATAGTTGTAC AACTTTGTGA
 61501 ATATACTAAG ACACATGAA TTGTATCTT TAAAAGTTA AATTTTATGG
 61551 TATGTGAATG ATACCTCATT AAAATAGTTA CATGAGAAAA AAATCAAAGG
 61601 CAAATACAG AGTATAATTG AAGTATTITTA ATTTTTAAAT ATAAAGTATT
 61651 TATAGCCAA TTTGATTTAC TTCTAAAATG TCCTTAAATA TAGTTAAATA
 61701 AAAGCAAAAC TTGTTCTAGCA TTCAGTGTGTT ATTAATTTCG AATACACAAA
 61751 CAATATCATG TTTTACTCAT GTGGGGTCCA CCACATATGT ATATATTAA
 61801 GAATAATGTG ATTGGTCAGT ACTGCAAAAT GTTTTGTGT ACGGTGGCTG
 61851 TGAGTACCAT ACTAATTAGT ACACAAAGAA CTATGAATTG GAACAGGAAG
 61901 AAAAGCAAGA AAATGAACAT TCAGCACTAT TTGGAAATGA AACCTCACTA
 61951 TGCAAGAATT CATTGCATTG ATGCCCTCTC AGGGGGAGTG TTGATTTAAAT
 62001 TAATATTTC ACAAACCTAAG AGCTTCTGCT GCTCAAATCC TCTACACACA
 62051 CTAATGCAGT GTCACTCTCT GAGTTTGGCA GTGGCACAGC CATAACTTTA
 62101 TGGCAGTTAG GTGAAATCCC TTTTGTGTT TTGGACATAG AACAAACAGAT
 62151 GTGGAGTTGT ACTTCTCTGG GGCCAGCACA AACGCCATTAA AGTCTGTGAG
 62201 TCTCATTCTG TCAGTGTGTA GCATCCATGT GTTCTTGTAT TTGGAGGTGT
 62251 GTGTTGTGA TTGGCAGGTT TCTCTTAAGT GACTCTGAAG GAGTGTGTCT
 62301 GATCACATCA CACCCATCCT TAGGOCTTAT TGATCATCG TGACCTTCC
 62351 CACTACTATA CTTAAATAG ATGOCCTGTA TTAAATTG ATTTTGAGAT
 62401 TAAACAGAAAT GGCAAGAGACA ATTTTGAGAC ACATCTTCT TTCTATGTCT
 62451 GTTAGGAAGA TCAAGATTTTC TAGGACAGTA GAACAGAGTA AAAGATGAGT
 62501 GCTGTTGGGA TCTATCTTCT CTCCTAAAGT ATTTTTCTC TCTCAGTAT
 62551 TCATCATCTA TCTCAATTTC TCTAATGAA CTCTTCTATA TAAAAGAGGA
 62601 TCCAGGTCCC ACATCCACTG TCAAGGAGGA ATGTAAGATT GACTTGCAC
 62651 TCAGCTGTG TAAGCAGTTT ATGGTTTTTC TTGGCAGGTT TAATGTTCTT
 62701 TCTTATCTCT TAACCTCTG CTATTCAATA GTAAGTAACCT CCTGGCAGA
 62751 ATTACCTGTG GCTAGAGAAT GCTGTTATCA GAGCATCTT GTTAATTGG
 62801 TACTTAGAAC AGAAGGTGTC ACCTATTGTA CAGGCCAACATTATGAGCA
 62851 AGGAGGCATT TGATTCTATCA AGATAGAAAT CTGCCGTGTA GGTGGAAACA
 62901 TGCTATGTG GGTGATGATG TTGTTAGAAT ATTAAGGCTT TTGTTGTGCT
 62951 GACAACCTTA GGAAGGTGTA CTCCAAATGT CTCCAAAGGT TTGCTGTAGT
 63001 TCTTACAGA AGTTGGCTG CTCCCTGGTG ACAGTGTGTA ACAGTGAACA
 63051 ATGTATGCTC TAGACTGGGT TCCCTCTCTC CACCCCTGTG CTGTTGGCC
 63101 TTGGCCAAGT TTGTTAACCA ACCACTTTT GCCTCAGTTT CTTTATGGGA
 63151 ACAAGGAGAA TAAGAATACT TCAATCAGGC CAGGGCTGGT GACTCAAGCC
 63201 TGTAATCCC GCCTTGGGA GGCGGAGGTG GGTGGATCAC CTGAGGTCA
 63251 GAGTCCAGA CCAGCTGGC CAACATGTG AAACCCCCATC TCTCTTAC
 63301 TTATGCTGGC CTGATATTGA TCGTCCATGG TAGAATTGAT ACTGCTTGTAC
 63351 AAAGCAGCCT ATTTCAGTCA GGACCTTCT TCTCTAGTTT CCTCTGTAGC
 63401 TATTACCTTA GCCTTCCATT TCATTCTCA CACTACAGAT ACTCTCATTG
 63451 ATAAAGGAAT GATGCTTTA TGCTTCAAG CATTCTGGCA AGTTAGTAAT
 63501 TCAACTATGA TTCTAGGTCA GACAAAAACCA GTTATGAACA TAAGACTGTT
 63551 TTAAATCTCC TCCCTGGTCC CCCAACCAACC CACCCCAATC AGGAGAAACT
 63601 ATGTTCTGCA TTGGTTAACG GAACCCGCTT CTTCTTGTG TACCTGACCT
 63651 ACAGATCCAA TCTATTCCCA GGAATTGTA TAAGAATTCT CAAATCTCA
 63701 GCAAGGCTAT GCCACTGTCA TGACTCTCT ATTCCGGTA GTGTCTTCT
 63751 CAGTGTAGGC TTGTTGATAG GTAGTTTGT GAAGTCTGT TCTCTATAAT
 63801 GGATCATATG ATTAAAAAA GAAGGACCTG GGTCTCATGC CCAGATTAAT
 63851 TTCAACAAAG TTGGTATGTT TTCTCTCAA ATTAATTCTT TTATGATTAT
 63901 CAAAGTTTA TATGCATACA GTATAAAATA TCAGTTCTC ATAAGGCTTA
 63951 TAATAAAAGAG TAGCTTCTCT CTGCCCTATT CCCCTCTCAT ACTGGGCA
 64001 TTACTCCAAA ATCAACTGCT TTCACTCTT TTAGCCATT TTCTATGGTA
 64051 TCTCTCATATT TCAAAACAGC ATGCTTATAT GGTGTTATTT TGAATTCTA
 64101 AACTTAGATT TTATCTACA GACTTCCTTA TGGAAGATAA ATATTTAACT
 64151 CTTTTGTGTC TACTCTTTT CTCTATCTT AATGTAGGCT ATGTTAAAT
 64201 TTGGGTAAATC ACAAATTAAAG AGCCAGTATA GTATAGTGGC TTAAAGAGTGA
 64251 GGGTGCTCAC CTCAAATTCC AGCCTCACCA CCCATTACTT TTGTTGACTT
 64301 TGAGCAAGCT TTAAAACGTC AGTGTCTAG TTGTTGCAAC TGAGTAGATA
 64351 CCTCATAGAA TTGCTGTGTA TATTAAGTGA CTTAATCCTA TGGGCTGAAT
 64401 TTGTCCTCCA AAGTCTATT GTTGGAAACT TAATCCCCAG TGCATGTGTT
 64451 AAGAAGTGGG ACCTTTCTAGA GTTGAATAGG CTATGAGGGC TCTGCTTCA
 64501 TGAATGGATT AATGCCGTG TTGCACTAGT GGGTCTTAAATA TAAAAGGAAG
 64551 TGTTTGACCC CCTTCTCTG CCTCTCTCATG CATGTGATGG CCTTACGAT

FIGURE 3-19

10/506513

64601 GTTATAATGC AGTAGTAACG CCCTTACCAAG ACACTGGCTC CTTGATCTTG
 64651 GACTTCTCG CCTCCAGAAC TGTAAGAAAT AAAAGTTTT TCTTTATAAA
 64701 TTACCCAGTC TCTGGTATTG TGTTATGGCA GCAAAAAACA GACTGAGACA
 64751 CTTAATATAT ATGAAGCATC TAGACTGTCT GGCACATTGT ACATTTTAAA
 64801 TCCCAGATAT CGATATCATC AATATCATCA TCATCATCAT CTGTGGCTGT
 64851 ATAATACCTC CCTCTGATT TAAAGGATGA GGGCTGGTGT AGCAGTTATT
 64901 AATATAAGTG AGCTAGTTGG CTATAAACCT CTCTATAGG CTTTGGCATA
 64951 AACCTGTGTC ATGGATAATC AGAGAATTG GACCTCTAA TGACAGGCCA
 65001 CTGACAAGAA AAGCCCAGAG GGAGCTGATT GAGCATGCTC AGTTCTTCT
 65051 ACCAAAGGCC TCAATCAGAC AGATTCCTT TCCCAGGAGT AGACACTGAG
 65101 GGGGTGAAA CAGGCTCTGA GTTGACTCCA CTGAGAAGTC CCTGAATGGA
 65151 TAGCAGCCAG GGAATTAAAGG AGTTTCCCTG TGGCAAGTCT CTACTCGTAC
 65201 AATATTAGGA CAGCTGTTT TTTAATTGTT TCTGTGGGTG CATATTTTIG
 65251 ATCTCCACAA CATAACTACT TACTCACTGT GTTGCTTTT GAAATTTATA
 65301 ACATCTAAAT TTGCAAATGT GAGGTATGCT CTCAGAAAA TTATATATCT
 65351 GTTAAATTCTT TTGACTCTT TAGGACACT TCCATCCATC TGTTGACCTC
 65401 TAGTAGCGTA CATACTCAGC AACAAATTAA GGTTAGTTCT GGCTTGTIG
 65451 TCCCCAAACAA TAATTGTTG AAAATACAGA AATTGGAAA GTACCCCCATG
 65501 ATGAGAAACT TTGAAAGAG AATTTAATGT ACAGTAACTA TTTTTTCT
 65551 CTGAGGATA ATTGGGGAA AAGAAATTG CTTTATATTG AGGCATATTG
 65601 AGTAAGTTGC TTTCATTTTC AAACAATTTC ATCACCTCTC CTTTCCCCAT
 65651 TCCCCAAACT TGTTCTTTT TTTCATCTT AAACCTCTGA TCTGTCTTCC
 65701 CCTCACTTA CCACGTAGCT AAATCTCTTA AGAGCCAACC TATTGOCACT
 65751 CCTTCATCT TTTTAATCT AATGGATCAT AAGTCTGTT GATTTCATCA
 65801 CTCACATCTC TCAAATGGT CTCCCTGGAT ATCTTGCTAC TTCTGATTTC
 65851 AGACAATTGT CATTGGTCAAC TTGAGCAGC CTTCAGCTG CCTTCCCTCCC
 65901 AATCTCCCTC ATGAGCATTG TGTTCTCAA ACTGTTGCCA AAGAGGAATT
 65951 TCTAAATAC CGTTGATCA TGTAATTCCA GGTTTAAAAA ACCTAATGTT
 66001 GACTCTGTA CATTAAAGA ATAAAGTGG TATTTCCTGG GATGACTGAC
 66051 ATGGCTTGC TGTTGATTCTG GCTACATCT TAGAGAATCA TTGAGCAGATA
 66101 TTAATTTCGC ATATGCTATT CCTTITACAT GGAATGTTCC TGCCCTCTCT
 66151 TTCCCCCATC TTGAGCTGTA TGAAAGCCCTA TTCACTCTCC ATGTCACCTT
 66201 GGGTGTACC CTGAGGAAAC AGTGGTTATT TTTCCCTGC CCATCTGGGC
 66251 TGGTACCCCC TCTTAAGTTG TCCCACAAAC CACAGTACAC ACCTTGGTCG
 66301 ATTATCACAC TGTTGTTGT TCTGCGGTG TTTGTGCTC TTGAATATGA
 66351 GTTTCTTGAG ATTAAGGGACG TGAGATCCCC AGTGGCCAGC AGAGCAGGAC
 66401 CTGTTTCCAC CCCTCAGTA ACTACTCTG GGGAGAGAA CCTACAAATA
 66451 AATGTGATT GCATGAATAA AGCTATATAT CCTTCTCTG TTCACTCTTA
 66501 TCCATTAAAT TTCTGAACTC TAAATGCTGT ATTTTCTCC ATAAATTTG
 66551 GTTTATTGG TTTCAGTTTC CTCTTTATAT GGATTTGAG TTCTAATTIT
 66601 GTCAACCAGC ATATCAACAG TTCTTCTAG TTGTTGTCCTT CCGGTAGAAT
 66651 GGCAGCTCCA TGAAGACAGG GATTAGTGTG TGTTTGTTC ACTGCTGTTT
 66701 TCTCAGCATC TAGAATAGTG CTGGCACATA TAGACTCTA CAAAGTATT
 66751 GTTGAAATGAA TGAAGGTGTT GCATACAAAT TTGATAAATA AACTTAGGT
 66801 TTCTTTCAA ATTTAAATCT TTAGCTCCAT TCTGTTCAAT ATTTTATTA
 66851 GAGATAACCT TTTAAATCT TCTTGTGCACT ATAAGAGTTA ATCCCATGAA
 66901 TCTTACAGAA CAAGGCTATA CTGAGAAATT CAAGAACAC CTTAATGAAT
 66951 CAGGGTTATT TCATTGTGAG AGAGTATAGA AATGGTTGAT AGTATGCTGT
 67001 AAGTAATTTC ACTTTACGTG TAAGTACTTT TCTCTGGCTT TCCAGAACAT
 67051 GCTGTTGGAG TAAGAGAGGA ATGCCATTATT GTGGACCGAG GGGATAGATT
 67101 TGGTACACGC TTCTTTGAG GAAGGTAGAG AGGTCAACTA TTACATATCC
 67151 AGCAGTAACCT TCCCTTCAA AGACTAAGTG TTCTCATTCA ATCATTGAT
 67201 ACTTTTTGTG CATCTACTAC AATTGAAAGA ATAGAAGAGG GAAATGCTG
 67251 TGTAAGGCAT GGTGGCAACAA TTAAAGAAC CCAGTTGG GGATACAAGG
 67301 TGTTGTTGTCG CACATGATG TGTTGCAAT TTAAATGCAC AGGGTAAAGA
 67351 ACTTTGAGTC AGTGACAATG AGTGGCAATG GTGGTAATT AGTGTGGGG
 67401 AAGATCAAGG GAGAGAGGG GTGCTGAGAG CCAATAGGGT GGAACATGTT
 67451 TGAAAGAGCT GGGTTCTGAA GTATTCTCC ATAGAAGGGC ATTTTAAATA
 67501 GCTTTTTGC GTCCATTTC TGTTAAGCAT TATTAATTG TTCTCCCTC
 67551 TTTAAAAGGT TCCCTAGCTT AGGTGCACTG GCAAGAAATT ATAAAAGCAG
 67601 CATGACCAGG CGTGGTGGCT CATGCTGTA ATCGCAGCAC TTTGGGAGGC
 67651 CAAGGGGGGA GGATTTCTG AGTCAGGAG TTTGAGACCA GCCTGGGCAA
 67701 CATGGTAAA CCTGCTCTC ACAAAAAATA CAAAATTAG CTGGGAGCAG
 67751 TGGCAAGTGC CTCTAGCCCC AGCTACTCTAG GAGGCTAAGG TGGGAGTTG
 67801 GCTTGAGGCTT GGGAGGTGGA GTTGCAAGTA AACTGAGATT GTGCCACTAC
 67851 ACACAGCCTG GGCAACAGAG CGAGACCTG TCTCAAAAAA AAAAAATTAA
 67901 ATTTAAACAA TAAAAGCACT GTGGTGTGTT ATAAGGAGTG ATGGAGTGGAA
 67951 CAGAGGAGGT TTTGGCTA GTCAGGTAAG GCTGGGGTAT GAATCTAGAA

FIGURE 3-20

68001 GTTTCATTAAATAGCAGG GAGCCCTTAG GCAAATCACT TAACTTCTGA
 68051 GCTTTGCCTG TTTCACCTGA GGTTGCTTC AAGATTGAAT GAAACCGTAT
 68101 ATATAAAGTG CTCTAAACA TCATCTGCCA TGTCGGCAGGT TCTCAAGAAA
 68151 TGTAGTTTC CCTTTCTCT TACAAAGATA AGATGCTTC TTTGAGTATA
 68201 TTTTCTAGGCT TCTGTATCAT TATTGGTTAT GATTTTAAT CTTGGTCCAG
 68251 CCACCCACCA TATGGTTCT GCAGTTAACAA AAAGAGGCAA AGGTTCACTA
 68301 CTGGGGAAA AGAGGTGTCAG AGAAAATGGGT GTAGAGAGAG TAGATGTTTG
 68351 AAGGGGATCT AATTAGAAA GTATTTTCCC TGTTGGTCCA GAATTTAAA
 68401 TTATAGAGTC TTATGAGAAA ATGATAATAT TCAAGGTTAAG AACAGTTTAT
 68451 TATTTCTCT CTATATTGGA GAATATTTC ATTATCTTAT ATAAGAACCT
 68501 TGTAAAAATT TTTCTCTTA ACTAGCTTCC CACTATAGGC CTTAAATCCT
 68551 GTTATTATTT CAAAGATTAA ACAACTATAG TAATAACAGG ATTATATGTG
 68601 CTTAAATTAA TATTACTTCA TTCCGCAAAG GATTTGAGGT AGTTTTAGA
 68651 AGCATAAAAC ACTGCACAAA TAAAATAGTA GGATAGGAGT AGAAAATAAA
 68701 ATTTCAAGCAA CCATGAAAAA TATGACATG TATATGTGT TAAGACTGGG
 68751 GGAATGTAAA CACATCAACCA GTCAAGGGCT ATATAGTTGT TACAGTCCC
 68801 TAGCAAAATT GACTCTAACG TTCTGGCAAAG CAACATGAAA AGGGAAAGCAT
 68851 GATGGATGTCG GTTAAATAAG ACACAATTAA CTTGTACTT TACTCAAGGA
 68901 AGCAAGTATT TTTGGCCCT TTGTTTCTTA TAGGAGATGC TGGGTAATGA
 68951 AGTAATGTTG GCATGGCT TATAGTGGAG GTAATAATGG ATTTTATCAG
 69001 GCAGTTCTT TAAGCATCTC TTGATGAAAG ATGAGGCTAT GACATCAAGA
 69051 GACAATTCTG AGGGGGGAG CAGTGGCTCA CACCTATAAT CCCAGCACTT
 69101 TGGGAAGCTG AGGGGGGAG ATCACTTGAG GTCAAGGAGTT CGAGACCAGC
 69151 CTGGCCAACA TGGAAACCTC GTCTCTACTG AAAATACAAA AATCAGAAAC
 69201 CCTGCTTTA CTAAAATAC AAAAATTAGC TGCGCGTGGT GGCAGTGCT
 69251 GCAATCTCAG CTACTTGGG GGCTGAGGC GGAGAATTGC TTGAACCCAG
 69301 TAGGTGGAGG TTGAGTGAAT CTGAATCAC ACCACTGAC TCCAGCTGG
 69351 GTGACAGAAC AAGACTCCAT CTCAAAAAAA AAAAAAAA AAAAAAGACAA
 69401 TTCTGAAAGT GGTGAGTGT TCTACCAAGGG GCAGGATGA TCTCATCTGG
 69451 GTTATGGATT CTAGGCTGG CCTCATCTAA GTTGACACAC AGAGGGTACA
 69501 CGCGACAATC TTCTATCTT CTTTAAATAT CACTGCTTTC AACAGGACTT
 69551 TTTTTTTTTT TTTTGAAAC AGGATCTTGC CCTGCOCTGT CACCCAGGTT
 69601 GGAGGGCAGT GGCGATGATCA TGGCTCACTG CAGCCTTGAC CTCCCAGCTC
 69651 AGCCCTCTGA GTAGCTGGG CAACAGGTGC ATGCCACCGT GACTGGCTAA
 69701 TTTTAAAGAG TTGTTTGGT TTTTTTTTC TTGAGAGACA GGGTCTCCCT
 69751 AGATTGTCGA GGCTGGTCTC AAACCTCTGG CCTCAAGGAG CTCTCCAGTC
 69801 TTGCTCTC AAAAGTGTGG GATTACAGAC GTGAGGCCACC ACGCTGGCC
 69851 CAAAAAACAT AATAATGTGG TTATTCGAAG AAGTGTATTIC CTCTAAAAC
 69901 ATAAATTCTAT TTCTCTTTT ACTCTTGTAA CTTCCTGAGG TGAAAAGTAG
 69951 GAAGTCCCCA GATTTTCTAT TGCTGTAAAG AAAGATTATA GACAAGCAAG
 70001 GAAGGAGTTA GAATAACCTG TGTGATAATG ATTAGAAGA GTTGGAGGTG
 70051 TATGTAAGTA TGCTCAGCAT GAATTATGT TTAGCTTAAT GTAGATAACAG
 70101 ATGGTTACAT GTGGAAAGTA TTTATAGCTA TGCATAGATA GGTGGTATA
 70151 TGACATGTA TTCTCTACT CCTTTGGCTC AGAGGGCGCA GAAGCCATGA
 70201 CATCCCTGTT GCAACAAAAA CACCTAGCAC CATTATCTT GGTTTGTAAAT
 70251 ACTATCTCC AGTAAAAAAC ACCAGGGCTC CTTCAGGAAAGGGCTGATGA
 70301 TAATATATAA GATTAGCTG GAGCATCTTA TATATCAGAA AGCAAGGGAG
 70351 TACTCAAAAA CTAAAAACAA TAAACTGCTC CCCAATAATG GGAGTATGTC
 70401 AAAGGGTCAC AGGAGCCATG TGAAAGAGTT TCCAATAGCC AACAAAATGA
 70451 AGAAGTATTG GAATTAAAT CAGAGTATAA AATAAAATATC TACGAGTCCA
 70501 TAATGATATA AACAAGTGTG TGAATAATAA AATAAAATGTG GGAGACTAGA
 70551 CAAATCCCCC ATGCGAGAAGA ATTCCAAAGTA ATTATATGTAG GTAAATACCT
 70601 CACTGTCAAA GAGGCGAGC ATAATTAAATT CCCCACCTCT GTAAAGTGTGG
 70651 GCTGCTTAGT GACTCTCTT CAGGAGTGC GTATAAATAG GGAAAAGAAG
 70701 ACAACTTCAC AGTGGAGGAA TCTGGAAACAC TCTGTCCCCAC CCAGATGATC
 70751 AAGGTTTACA TCAAAAGCAC TAAGCCATGT TGATACTGCA CTGTGTTCC
 70801 TTGATATAAT GGGATGAAAT GGCACCTTGT GTAGTCGTGC TTCCAAAAAA
 70851 CCTCATAGCC CTAGACTAAT CATGGGAAGA ACACCAAGACA AATCTTAATT
 70901 GAGGGACATG CTACTTAATT CCTGAAAAGT ACTCTCTCAAT GCTGTCAGG
 70951 TCATCTGAAA CAAGAAAAGT CTGGCAAAACT GTCACAGTC AGAGGAGACT
 71001 AAGGAGATAT GAGGACTAAA TATAATGTGG TATCTTGTAT GGGATCTTGG
 71051 AATAGAAAAA GGATATTAGT TAAAACCTGAG GAAATCTGAG TAAAATATAG
 71101 ATGTTGTTA CTAATAATGT ATCAATAGTA GTTCATTAAT TGTGACAAAT
 71151 GTAACATACT ATCGTAAGAT GTTAAATAA GAGGAAACTG GATGTGAGGT
 71201 ATATGGCAC TCCCTGTACT GTTCACAATT GTTATGTAAA TCTGAAACTA
 71251 TTCTAAATG AAAGTGTATT TTATTTTATT TTATTTGAG ACGGAGTCTT
 71301 GTTCTGTGTC CCAGGCTGTA GTGCAAGTGGT GAAATCTCGG CTCACIGCAA
 71351 CCTCCACCTC CTGGCTCTAA GCGATTCTCC TGCGTCAGCC TCCTAAGTAG

FIGURE 3-21

10/506513

71401 CTGGGATTAC AGGCACGCGC CACCACACCC AGCTAATTTT TATATTTTT
 71451 GTAGAGATGG GGTTCACCA TGTTGGCAA GCTGGCTTG AACTCCTGAC
 71501 CTCAGGTGAT CCACCTGCCT CGGCCTCCCA AAGTGTGAG ATTACAGGCG
 71551 TGAGCCACCG CGCCAGACA AAAGTTTATT TTAAAGG TAGGAAAGTT
 71601 TCACATTTG ATGTACTAT TGAGATAAAA CTTGGTTGTT GTTGTGTTT
 71651 TTGAGATGGA GTCTTGTACT GTCACCTGGA CTGGAGTGCA ATGGCATGAT
 71701 CTGGCTCAC TGCTACCTCC ACTTCCCCGGG TTCAACGGAT TCTCTGCCT
 71751 CAGCCTCTG AGTAGCTGGG ACTACAGGCA CCTGCGACTA CGCCAGCTA
 71801 ATTTTTGTA TTCTTGTAG AGATGGGTTT CATTATGTTG GCCAGACTGG
 71851 TCTCTAACTC CTGACCTCGT GATCCGCTA CCTTGGCTC CGGAAGTGCT
 71901 GGGATTACAG GCATGAGCCA CGGTGCCCTGG CCAAACCTGG TTGTTTCATC
 71951 TGAGAAATGAG GTTCCAAGA ATTGAAGATA CAAGTTAGCT AAATAGTATC
 72001 AGTGAACCCA CAGAGTATAA CTTCAGACCA TTGTTGTTT TAAGGCAGAT
 72051 CTATGCCACA GAGAAGTATT TGAATTTAA TCAAAGTATA AAATAAAATAT
 72101 CTATGAGTCC ATAATGATAT AAACAAGTGA TTGAATAAT ACATAAAATGT
 72151 GGGAGACTAG ACAAAATCTCC CATGCAGAAG AATTCCAAT AGTTTATGTA
 72201 GTTAATATT TCAGAGTATC AGTACTATGTA TCCTCTTAC AATGCTATAT
 72251 CCCACTAAAA AAAAAGAAAAA GAAAAAAAG AAAAGAACTG TGATCCTAGT
 72301 TGCGAATGTT GACTTATAGC CAGAAAAGAT GACTTTCTTA TTGAAAGCA
 72351 TCATGAAATG CTATCAGCAT GCAGAAATGA GAGGGCATAA CAGAGAGCTA
 72401 TTCTATCGTA TTTTTATTTA ATGTTTAAAG AGAGCTATTA ATAATATAAT
 72451 GTGAAGAGAA GTTTTAATT CAGAGGAATG GGATGTTTGG TTAAAGATT
 72501 ATTTTGCAA AATGTAGTCT GTCATTTTA AAGTGAACCT TATAATGAAA
 72551 AGAGTTGAA ATTATTTCCC TATTATTAAAT ATTATTTAT TTTTATTACT
 72601 TTCTGCCAT GACAATTACA GTGCACATT TCCCTATTT TAGCTTTTTT
 72651 CTGGTAAAGT GATTTTACCT CCTGTAGATC GTCACTTCTG AGACTTTCTG
 72701 GCACTAGGGA CTGGTTCAT GGAGGACAAT TTTTGACAA ATTGGAGGGG
 72751 GAATGATTC AGATTTAACAC TGTCTATCT CAGATCATCA GGCATTAGAT
 72801 TCTTACAAGG AATGTGCAAC CTAGATCCCC TGCAATGACA GTTCAACAATA
 72851 GGGTTTGTG TCTTATGAGA ATCTAATGCT GTGCTGATCC GACAGGAGGT
 72901 GGAGCTCAGG TGTAATGCT CGCTCACCTA CCACTCACCT CCTGCTGTG
 72951 GGCTGGTTC CTAACAGGCT CGGGGGCTGG GGACCOCTGC TGAAATAAC
 73001 CTTCGAAGA TCTGAAAATT AACTTTAGTA TTTTTTGTA TTACTCGAT
 73051 ATTTAAACA AACAAAAATC TAGAGAATGA CATAACAAAT GTATTTCTG
 73101 CGTATCCACT ACTCTTTACT CAGATCCTAA CATTCTCAGT TTGAAAAGA
 73151 TGTAAGCTGG TCACAGTGGC TCATGCTGT AATGCAACA CTTAGGAGG
 73201 CCAAGGAGGA CAGATCAGCT GAATCCAGGA GTTAGAGACC AGCCTGAGCT
 73251 ATAAGGCAAAC ACCCTGTCTC TACAAAAATT AGCCAGGTGT GGTCCTG
 73301 ACCTGTAGTT CTAGCTACTC GGGAGCTGA GGTGGGAGGG TCAATTGACC
 73351 AGAGGTATA GTGAGCTGTG ATCTGOCAC TACACTCCAG TCTAGGTGGC
 73401 AAAGCAAGAC CCTGACTCAA AAAAAGAAAA AAAAAGAAAA AAAAAGAAAAAG
 73451 ATGTAAACAT TACAGGGCCA GCTGTGGTCC CGTGTACACT TCTCCATTCC
 73501 TAATCCCCCT CATGCACACT TTCCACAGG TAATCACTAT CCCACATTG
 73551 CTTTAATTAT TCCCATCATG TTTTATGCTA TGACTACAA TGTTGAAATC
 73601 TATATCCAC TGATGTTAA TACCAACATT TTTTATTATA TTTCACCGCT
 73651 GATGGCAAT TTAGGTTATT TCCAGATTT TACTATTACA GATGCTTCTG
 73701 TGACATCCT TACTCATTTC TCTTGTGCA CATGTGCAA ATTCTCTGG
 73751 AGTACATACC TGGGAGTGGAA ATTACTAGAA TGTGGTGAT GTACATGTTG
 73801 TTGTATTAT CAGTAGTTCA CTCTTATTAA TTGCTGTGTA TTCCATTACA
 73851 TAGATATACC ATAATTTGTT TATCTAATCA TTATTTATA GACATTTGGG
 73901 TTCTTCTGT TTTTTGACT ATTAGAAATA AAGCAGCTAT AAACATTGTT
 73951 ATATAAGTTT TTGTATAGGC ATATGCTTG GTTCTCTTA GGCCTAGGGG
 74001 CTGGGAACCC CCTAGGAATG GAGGAATAGC TGGGTCATAT GGTTAGGTTA
 74051 TGTTAACTT TTTAAGAAAT TCTGAACCTG CTTTCCAAG TGTTTGTACT
 74101 ATTTTATATT COCGTAGCA GTATGTGAAA GTTCTTGTG CTCTACATCC
 74151 TCACCAACAC TTGGTATGAT TAGTCATT TATAGTACCT GTGATGTTG
 74201 TGGTTTTTCA TTGTTTAAT TGACAGTTCC CTGATGACTA ATGATATTGG
 74251 GTGTCATAGG CATATTTCC ATTATATAT TTGTTTGTA AAGTCAAAAT
 74301 TTTTGGCCA TTTTAAAGAT TGAGTTGCTT GGTTTTATT GAGTTCTGAG
 74351 AATTTTGAT GAAATTATA TACAAGTTCT TACTAGATAT GTAATTGCA
 74401 AATCTTCTCT CTCAGTTGT GGCTTGTCT TTATCTCT TAGCAGTGTG
 74451 TTTCAAAGAG AAGTTCTTAG TTTGATGAA GTTGTGTTA TCAACATTG
 74501 CTGTACTGA TTCTCTGTAT GGGCATTAG GTTCTTCTG TTATATCTAA
 74551 GAAATTTTG CTTAAACAA GATCACAAG ATTTCTCGG GTATTTCTT
 74601 TTGTTGTTG AGACAGAGTC TCACTCTGTT GCCCAGGCTG GAGTCAGTA
 74651 GTGCACTCTC AGCTCACTGC AACCTCCACC TCTGGGTTA AAGGATTCT
 74701 TGTGTTCTAG CCTCTGAAAT AGCTGGTATT ACAGGCAATGT CCCACCATGC
 74751 TCAGCTAATT TTGTTATT TTAAGTAGA GACAGGGTTT CACCATGTTG

FIGURE 3-22

10/506513

74801 GGAAGGCTGG TCTTCATTG CTAACCTAG GTGATCTGCC CAACTCAGCC
 74851 TCCCCAAAGTG CTGGTGACAC AGGATTTGC TCAGCTACTT TGCCAAACCG
 74901 GGACTCACTC GCCCATGGGC CAAGGCACCC CGCTCACTTG GTCCACCTGT
 74951 GCTATAGCTT CTACTGACGT TCAGCGGTT CCGAGCTTT GTCATGCATC
 75001 TAAAAAAGAAG GAGGATATGC TGACAATTG AAGTGTAAAG ATGGGTGGAG
 75051 AAGAATTTA CTGAGTTATG GAACAACCT CAGCATTAAG GGGACACGGG
 75101 GTGCTCCCTC ACCCCCACAG TCAGGTGGTT TTCTCTCTC TCTCTCTGTG
 75151 TCTGGGTCTG GGGCTTTTTA TGGAACAGA ATGGGAGGTG TGACAGATT
 75201 GTTTTGTGAG TATGCAATAA AAGTAAAGT GAAGACAATA TTCAAAGGTG
 75251 GGCGCGATAG TGAGAAAAC CAATTAGGA AGGGTAGTA TGAGCCTGG
 75301 CATGGTGGCT CGTGCCTGTA ATCCCCAGAC TTTGGGATGC CAAGGCAGGT
 75351 GGATCACCTG AGATCAGGAG TTGAAACAA GCCTGACCAA CATGGTAAA
 75401 CCCCGTCTT ACTAAAAATA CAAAAATTAG CAGGGTGTGG TGGCACACAC
 75451 CTGTAGTCCC AACTACTTGG TAGACTGAGG CAGAAGAATT GCTGGAACCT
 75501 GGGAGGCAGA GGTTGCAGTG AGCCAAGATT GCACCATGGC ACTCTGCT
 75551 GGCTGACATA CGGAGACAGT GTCTCAAAA AAAAAAAAAA AAAAAAAAAA
 75601 AGAAAGGTA GTTATGTGTA AAATAGGTGG AGGGTGGGA TCAATCAGAG
 75651 GAAAGCATGC CAAATGGGAA GACAGGTCT CAATCCAGTC CATGGATTG
 75701 CCTGGGACTT GTAGCTAGGC TTAAAGTGT CTTCAGCTTG AAGGTCAAGGT
 75751 TTACCAAGGG ACCGGTTCT ACACCCCTAT CTGCTTAGGC ATTTCCTG
 75801 CTCTTGCTGC TATCAGTTCT CCCTCTGAA GAGGTACATC TAATGCCCCAT
 75851 TAGAATAGGG ATGATGACTG ATACTAACG CTTCCTGCTG ACAGGGGTGC
 75901 GGGGTGCTGT TTGGGAAAAA TGCCAGTCAG ATCTCOCTCA GAGGCCTATC
 75951 TAAGGGTCCC CAGTAAAAGG GAGCCATGTT CTGAGGCTCC AGTTTCAATGA
 76001 CTGGAGTTA ATGGCCTGAA AATGAGAAGA CAAACAGATT ATTAGAAGGC
 76051 ATGTATCAAAC AAAAATAAG GGGGTAAGGA CAGCTCAAAA ATCTCTGAGGC
 76101 TGCCAAACATG CCGAGATAAC AGGTGGCTAT AGTTATGCTT GCTAAGATTT
 76151 GGGTGAATGA GGTCTGGCTT TGTCAGCTT CTGGTCTT ATTTCCTCAA
 76201 ACAAAAGAAC CTCTGGGTTA CGGGCACCTT GTTACTCCT ATCACCTGGC
 76251 AGGATTTGCA GGATAATTGC CCAGAACTAG AATATTGATC CAGATTTTA
 76301 CATCACCCAT CCCTTTGTT TCTCTGAGC TGCACTGAT GATCACTGGT
 76351 TGGTTCACAG AAATAAGCAG GGTTAGTCTA AAATCAGAC AAAAACTTAA
 76401 AAACAACAA TGAGACTAGA ATTTAATGAA AAGTGTATGA TAAATTTGA
 76451 AACATAATTT TTCTCTCTCC AGTCTCTT CTTGGTAAAA ACAAAATCATG
 76501 ATAGGACTGA GTCTTTGCA GAATAAACCT TAGTCTTATA TTGGGCTGG
 76551 TTATTTGCTT AAAGCAACAGC AAGAATAATT ATTTTTCACA CAGGCTTTTA
 76601 AAATTGGCTT TGATGAACT CTGTTCCACA AGGAATTTCAGATAAGACCT
 76651 TTAAAGCTG CGTCCAGGCA TGGGTTGTA TCTCTAAATA CCTATGAGTT
 76701 GGGTAAATTG CTCTCTCTT GAGGTCCTCAA GATAACATGG GTTCTGGG
 76751 CCTATTAGAA AGTACATTC TTATTCACC ACAGATTAGG AACCTCTGAC
 76801 AGGGACTGTG TAGAAGACAA AGTATGAGGC CAGTTTCCC AAGGGGCTTT
 76851 TATGGTTCT GCAAGTCAAAT TTGATTCTT TAAAGGTAAG CACACCTTC
 76901 CAGTCAAAGC CTTGGTAAAAA CAACCAAGTT CTCCAGTTG GTCTGTTGC
 76951 AAAAGAAAAT GGATTCCTAC TGCACTGATG CAAATAACTG TATTCGTGCA
 77001 AATTAAGAAT ACTCACAAAT AGTTTCAAG TTCTGAGGAA ACCAGGCAAA
 77051 AAGAAATAAA TTGTCCTCAA ATTTGTTCA CTGGAGTATA CCTTACTCAA
 77101 TTGTTAAAAG CTATAGATAG CTCAACATGA AAGTTTCTT GACTCTGAAA
 77151 AACAAAACAA GGATCAGCAA TGTGTTAACG AAAAAAAGAT TACTTCAGCT
 77201 TTCTATTAGT TCAGTACATT CTATTAACCTC TTCTCTGCT TGATATTCT
 77251 GAACATTC CTCCTTCATG AGTCTGTAC ATTTTCCCCTC TATTCATG
 77301 TCACAACTC CAAAGTTATC AGAAACCTGC ATTTGAGAGC ACCTGTCAA
 77351 GTOCCATAGC TGATTATAAA CCATCTTTG AAAAGGATCA AAATAAGACA
 77401 ATTTGCTGTG AATGACAAAAA TGTCCTTTGG TAATAACAGT CAAAGCCATG
 77451 ATTGACAAAG AAATTGGTT ATTTCTGAGC TTTCACATAA CAACATAATA
 77501 ATTT
 77551 GGCTGGAGTG CAGTGGCGG ATCTCGGCTC ACTGCAAGCT CGCGCTCGG
 77601 GGTTCCACACC ATTCCTCTGC CTCAGCTCC CAAGTAGCTG GGACTACAGG
 77651 CGCCCGCCAC TACGCGGGGC TAATTTTTG TATTTTTAGT AGAGACGGGG
 77701 TTTCACCGTT TTAGCGGGGA TGTCCTGAT CTCCCTGACCT CGTGATCGGC
 77751 CGGCCTCGGC CTCCAAAAGT GCTGGGATTA CAGGGGTGAG CCACCGGCGC
 77801 CGGCAACATA ATAATTTAA TTACGATTGA TAGCATATAC TCAGACATTA
 77851 GAATTTTAGA AACCTCATAG AATTTTGAA CATATGTATT TTTCATTAAAA
 77901 ATATAACCTG AAGAAGATTA AACATTATTT TTATTTGGC AATCCCCACAT
 77951 AACTAAACAT GTCAGTTAAT CCTGTTTAC TCTCTTTGG ATGCTCCAGG
 78001 AGCCCTCTGT AGTATTCAGA AGTAAAGGGT CAGAAAAGAC AACCTTGAAA
 78051 CTGAAGTTTG ATTTGGGAA GCGTGTAAAG TACATTAGAG GTTTAAACAA
 78101 CTTTATATTA TGAAATACAA TTCCAGATTA CCATAAGTCA TTATTTAGC
 78151 CAAAATGATG ACTCAAAAT TTTAAAAAG GTAAAAACCT TTACTCATTAA

FIGURE 3-23

10/506513

78201 AGAGTGAAGA CAGCTTTCCA AACAAACAAT CCATCTCTGG TCTCTCCCAC
 78251 ACCCTTATT TTGATGAA ATCTTAGAT AATTCTGTCC AATCTAAC
 78301 AGTTGACCA TGAGGTGAGA TTCTTATAAA CCTTACAAA TTTTGTAA
 78351 AGAGTAGATC AGTGCTTAA GAAAACCTG TTCTTTTATT CTAATGTTCA
 78401 ATTACAGAA AAACCATGTA ATACCCCTTT GAATTTAGTC AATATGTTCA
 78451 CACACAGAAT TTCTTTGCA AGATTAATT TTACAAACCT TCCACAAACCT
 78501 TCAACTTTAT CTATCCAACT TAAAAACAAAT TATTAATTC TCTAAACTAG
 78551 GCAAAATTT AAATCCCAT GCCTCTTAT AATCCTTAC TAAAAACACA
 78601 TTTACTTTCC TTACACACCT TGATGAAAT CTGTTTTCAG TAGTCTAAT
 78651 TACATGGTAT AATGGTAAAC CTTAGCAATT TTTAATTTTA ATGAAAGCC
 78701 TGGTAAGTTA TTTAATTAT GTGCTACCAA TTATACTTA AGTTGAGGC
 78751 ACTCTGGTGT GCTATGGTA ATATGGCTT ACAAAACTGA AAAGCAAGCA
 78801 AGGTGAACAA TTTTCAAAG CCCAAGAAGC AGGTGGGTG TGGTGGCTCA
 78851 CACCTGTAAT CCCAGCACTT TGGGAGACCC AGCAGGGTGG ATCACCTGAG
 78901 GTCAGGAGT CAAGACCAG CTGGCTAACCA TGGTGAAT CGTCTCTAC
 78951 TAAAAAAAAT AAAAATTTAT GTTGTGTC TTATGGTGTAGT
 79001 CCCAGCTACT CAGGGGGTGG AGGCAGGAGA ATCACTTGAAC CCGGGAGGC
 79051 AGAGGCAACC AAGATCATGC CACTGCACTC CATCCTGGAC AACAGAGTGA
 79101 TACTGTTGAA AAAACAAAAA AGAGAAAAA GCCAAAGAAG CAGTTTATAA
 79151 CTTAAAGCA TTTAGTAAAC CTAGTATCTG ACCTGCATAA TTTAGACAC
 79201 ATGTTTACAT TTGAGACA TTTGTATTTT ACCAATAATC TCTAAACCTT
 79251 TTTATTTTC AAATATTAAAT ATCATTGAA CTAAAAGGTAA TTATAGCTTT
 79301 TTTTTTCTC TCAGAAAATA TTTGATCTAA GTGCTTATTTT TTCTCTAAC
 79351 CAATTAATTAA GAGCTTTTTT TTATACAAAC ATCACACATA TTGACACATAT
 79401 ATAATACAC AGACAGAGGA TCCAGTAGTT GTAAGATTTT TCATTGTCGA
 79451 ATCTCTTAAT TAGATTACTG ACCTCAGGAT GGAGCCTTC AAGAGCAGGG
 79501 CTAGGAAAGC ATGCAGTTTC TAGGGCTAA TAAATAGTTA TAGCTGGAAAG
 79551 ACAAAACAG ATTTTGAGAG GGATTTATCT GCTTTAATT CTTGGGTTT
 79601 CATGAGGAAA ACAGAGGTTT TTTCTAAAAA TGGGGTCAGT GGTGCTCTT
 79651 CCATTTTTTC CAGGGAGTCC CAGGCCATCA GAAGTTATCT TAGGGCTCT
 79701 CATCGTGCATTAAGAGGG CAAGACAAAAA TGGAGAAAAG TAATTCTAGTT
 79751 GACTGAAAAA GAAAATCTTT TTCCAGTGAA ACAAGATGCA AGAAGAGGAA
 79801 AACATAGAGG CTTTTAAAT ATGCTTATAG CTTGGATATC CACTTTAAAT
 79851 TAAAGCTGACT TTTTACCTA GTGCTCTTAT TTTAAAAAT CTTTTAAAT
 79901 CCCTGTTAC CAAACTTTAG CCTCACCAAG TGGCAATAT TTCTGGCTTT
 79951 TGAACCTTAC CAAAGTAAC CTCACAGGTG AAACCAACAA GCGTTAAGTA
 80001 AGGTGTCAC TTCACTGCT GTGTACAAGG TATTTCAAA GAGATGGTAA
 80051 GCAGTTTTA CAAATCTAG AATCTTTAA GATACTCAG AGAAAGGAAG
 80101 ATTTAAGAAA GGAAGCTAGA AGTTGTTCAT GGAGGGGAAG AGAATCAGCA
 80151 AATGATAAAA GTCACACAGA TATTAGGOCAG AAAGTACTCA TTGCTTAAGC
 80201 CAGGATTGAA CCTGGGCTTC CATTGAAAAA TGGCAGAGAC CAAAGAAG
 80251 TCTTCCACG TGGTACAAG GTCAAGCTCC CAAGGACATA AAACAAGATG
 80301 GAGACCTTAT TCAGTTTTT TTCTCTCAGA GACCTGTAGC AAAGTCTGTA
 80351 ACTGACCAAGT TTGCTGGCT GGCTTGAACA GTGGCTTAT GGGGCTCTAG
 80401 GTCTGTGTTCTATCTCTAT TACTCTTAT CACAGAACTG TACAGAAAAG
 80451 CACACAAAGC ATAGCAGATT GGCTACAGCT TAAGATTAGC CTCACAAATC
 80501 CTTTTTCCA TTAATCAAA CTTTACAGAA GAATAAACAG TGATTTTAT
 80551 CCTTCTTTT ACTGGTTTGC ACAGGGAGAA AGAGGCCAGA AGTCTGACTG
 80601 GTAAAGACTT TTACTCTTTT ACTGGCATGT CAGGCTTCTG GTTCCCTTC
 80651 CCAGTCAT TTTAAGCCAA GCAGTTTAAG GTTGGGGAT ACTAAACTTT
 80701 TCACAGATAT TTCTTCTGAT GTTTAAATAG TTTGTTTGTAG CCCAGATTTA
 80751 ATAAATGTTA TCTGTAGTAG GGTGCTGATG ACCACTTAT TCCAATGCCA
 80801 CAAACAGAAG TTGATTAGCA AATTATATAT ATATTGCTAT AGTTTATTT
 80851 TACATAATTT AAGGCTATTA GACCAATATT GTTATTACAG GAGCATAGAT
 80901 ACCTGAAAG AGGCCAAGAT GGAGTGGAAA TGCAAGTTGG AGCTACCAAA
 80951 GGGCAAAAAA CTATTCATCA ACCTTTAACT ACAATAAATC TTCCCTTTGG
 81001 GTATTTTCAT TTGAAACAC TTTGOCCTTG CAGTCATTTA CATCGGCATA
 81051 ATTACAACAC CTTTGTCTTA TTTGGCATGC AGGAGAATCT TCTTAAATAT
 81101 TAAACCTAACAC TTTTGAGT GATTGCTCATC CTGCTTTTGT CATACATTTA
 81151 GAGCCTTGGG ATTTTTCTC AGAATGGAGT AGGAAACAAA TAGGGCTGG
 81201 ATAGGGAAAT TGAAAAGCTT CCGTGTATT TTCTGTGAA AGATTTCTTA
 81251 ACATGGCTTC TTGGATGTGT CTCTCTGATG TCAACACATAC ACACATATTG
 81301 AAATAAGAGT TATACAAGCA CATCTTGAC ATTTTGGCA TCTATGTCTC
 81351 AAGACACAGG ACATTCTATC TGGTGTCTG ATCGAACAC TTTGCTATGT
 81401 TACTAGACTG AAAATTATG GAAGGTAGAG AAATCTCTA TTGTTTTA
 81451 TATTOCCAAC AGCTAGGAT AGAGCCTAGA ACATTAAGA ACACATAAAT
 81501 TTAAATAGTG TAACTGAAAAA GCAGGTTAGT TGGTCACTGC ATGTAGAGTC
 81551 CAATTAACAA GAGCAAGTTC TGATACAAAG AAGTGTATTT ATTCAAAAC

FIGURE 3-24

10/506513

81601 TAGCTTAGGG GAAGAGGCAC AAAGCATCT GCCTTTAAAT GTGCCACTTC
 81651 ACCTTTGGAG CAAAAAGTGG GCATTTTTAT AAGGTAGGGG AGGAAATGAG
 81701 CAAGGGCAAG TGTOCCTCTG CTACTGGCA AGTATCTGAG CTGGCACCTT
 81751 CTTGGGCAGA AGTAAGTTGT AAAAGTGGCC AAGTGGGTAT GCTTCAACA
 81801 TGCCCTCTA GTGGGCATGA GTTCTGAGAT GACCCGTGG AGAGTTCTGT
 81851 GGGGGCATGC TTTGGCTGCA AAATAGACTG TTAACCTTCTG AGGAGAGATC
 81901 CTTGGGGGGA AAATATATAT TAGGAAGTCC TCTGTGGGTG TTTTGAGAA
 81951 GGACCTAGAG GGAATGGGGC TCGATTGTTA TTATTTATT TATTTATTTA
 82001 TTGTGTGTGT GTGTATGTGA GAGAGAGAGA GAGAAAGAGA GAGAGACGAG
 82051 GTCTTGCTCC GTTGGCCAGG CGGGAGTGCA GTGGCATGAT CATAGCTTAC
 82101 TGCAGCCTCA AACTCTGGG CTCCAGGGAG CCTCCCTGCCT CAGCCTGCCA
 82151 AGAACGCTGGG GTGACTGTTG TGTGCTACCA TGCCCAGCTA GTTTTAAAG
 82201 TATTTTTTT TGACAGATG GGGTCTTGT TTGTTGCCA GGCTGGGCTT
 82251 GAACTACTGG CTTCAAGTAA TCTCTTACCA TCAGCCTCCC AAAGTGCCTGG
 82301 GATTATAACAT ATGAGCCACT GTTCTGTC TAGTTGCAC TTTTTTTTT
 82351 TTTGAAACAG AGTCCTACTC TCTTGGCCAG GCTGGAATGC AGTGGCACAG
 82401 TCTCAGCTCA CTGGAAACTC CACCTCCCGA ATTCAAGCGA TTCTCATTAC
 82451 TCAGGCTCCC GAATAGCTGG GATTACAGGC ACCGGCCACC ACACCCAGCT
 82501 AATTTTGT ATTTTAGTAG AGATGGGGTT TCGCCCTGTT GGCCAGGCTG
 82551 GTCTGGAACT CCTGACCTCA GGTGATCCAC CCACCTCGGG CTCCAAGGT
 82601 GCTGGGATTA CAGGTGTGAG CCAACACGCC TGGCGTTTG CATTTTAAG
 82651 ATAAAAAATT TACCATGCTG GATATATTGT AGTAGCTATG TACTTCAGTT
 82701 TCTCAATTGT TAAACGAACT TAATAGAAGT ACTACCTTAT AGAATTTGG
 82751 GGATTAAATG AAATAGTCTT CTGAGCACAA CAAATATATT ATCAGCACAA
 82801 CAGCTAGCTC TATTGAGTC TTATTATTAT AATAGCAGTA ATAGTCAGAC
 82851 TTGGAAGGGG TGAAAAGAGAA CAACAGTCCA TTTTATTTTT GTGGCATATA
 82901 TATCATAGGT CGTAAGACCT TGGATTGTTT AGATGCCATG TTTAAACTTG
 82951 ACAAAACTAG AAATGTGTG AGTGTGCAAT AGCAGGTGAT AACTAATCCA
 83001 ATCATTAAATT TATTCTGAA TTTGATCAGA AGACAGACCT AACTTCATCT
 83051 ATTGCCAATT ACTATTGAA CAAAATCTAT TGGAAATTCA GTTAGGCAC
 83101 TGCACTACAA CAGTGTGAAT TTCAAAAGTG AGATATTITA TGTTGGTTTT
 83151 TAAAGTAGGT TTCAAACCA GTTAAAGGT CTAAACCCA TTAAGAAGGA
 83201 TACTATGGGT CAGGAATAGC ATTTTATGAG GACTCTTGTGAG AAAACGGTGC
 83251 TGTGTCCCCCT CCACCATGGT ACAAGTGGAG GTTACTCTCA CTITGTCCT
 83301 TACTTGGTAT CTCTCTTGT TCTCTCACTT GGTATCGAGT GAGAGGGGCT
 83351 TGAGAGGGAC GACTTAAAGAG ATTTAAAGGA TTCCCCCCCAG TTGTGGGGAA
 83401 CAGAGGACCA GGGTCTGACT CTCCGAGACA CCCAACAAAGG AGAGAACTGT
 83451 GGCTGGCTTA CTGTTCCAC AGAAAAGAGCT ATACTGTAAT GTGTCTGTG
 83501 TTGAATTTCG CTACACTCA GCCTTTGTCA GGGCAAAGGA AATGTATTTC
 83551 CTGCAGATTA GAGGTGGGCC TAGCGGGAGGA GAAGGGTAGC CTGGAGTTG
 83601 ACTCTGCTCC AAATAGATGC CTGAAAGGGC AGTGAAGGTT CAACGGTGAG
 83651 TCTTTGAAT GACAGCCAA AAGCCAGGAG AAGAATGAAT TATCCAAGTC
 83701 AATGGTGCTA TGGCCAGAAG GAACTCTGAG GTGAGACTCT GAATAACCCA
 83751 TGAAAGTGC TCTGAGAAAA AAGAATTAGC TTCAACACTC ACGACAGACGG
 83801 TGTGTTGGCA GGAGGGCTCA TGTGGAATC TCTTGCCTT CCTTCCCCAG
 83851 CCTCCATCTC CCATGCTAC CTTGGAAGA TCGGACAGCT AGGGTTGGTG
 83901 TAAAGTCGTG GAAGAGAAGA AAAGCAGCT ATTTCAATCC CTTCCAGGT
 83951 TCCCTGGGGC TGGGGAAAAG ATTTGATTAC CTAGTGAATA TTGGTTTGT
 84001 ACCTAAAGTG ACCATAAGCC TTCTTTAAC ATTGACAAAA AGAATCAAAT
 84051 GGGCCTGTTG AAGTGTTCAT CTAGTGTCAA GGGAAAATT TTCCCCACTG
 84101 AATAAATTAA AAGAAGGAGC TCAAGACAAG AAGCTATATT TGATTATATC
 84151 CTGTTAGTGC TTATTCATA GACACATAAA TCTGTAATT TTAAATTTTG
 84201 GTATAGAAGT AGGTGAAAT CCACAGTAAT TCACAGAAAC TTGTGCAAGG
 84251 GTTTTGTCTT CTTTCTTTT CTTTCTTTT TTTGAGACAG
 84301 AATCTCACTC TGTOCCCCAG GTTGGAGTAC AGTAGGGATGA CCTCGGCTCA
 84351 CTGCAGCCTC CACCTGCCAA GTTCAAGCA ATTCTTGTGCT CTCAGCCTOC
 84401 TGAGTAGCTG GGATTACAGG CATGAGCCAA CACGGGGGGC TAATTTTGT
 84451 ATTTTAGTA GAGACCGAGGT GTCTCCATGT TGGCCAGGCT GTCTTGTATC
 84501 CTGACCTCAG GTGATCTGCC TGCTTGTATC TCCCAAAGTG CTGGGATTAC
 84551 AGGTGTGAGC CACCATGCC CACCAAGTC TTTTTCTT AAAATATCTT
 84601 CACTCATATA AGCACTATAT GCAATATAAG GATATGCTCT TGGGTCTT
 84651 GATGTGGCT AATATTTAGT GTTGGCCCT TAATTATAAA AGTTGCTTTT
 84701 ATCTAAAGT AGATGTAGT TGTCAGGCA TGTTTGTGT AAAAAAATAAA
 84751 TAAAAAATAA AAGTAGATGT TAGGATATT TCTTCTAGCC TGCTAGTAT
 84801 TTATATTAGA TTCTTTCTT TTTTGAGAAA GCGCTCGCT CAGCTGCCA
 84851 GGCTGGAGTG CGCACTGGGG CGATCTGGC TCACTGCAAC CACCATCTCC
 84901 CGGGTTCAAG TGATTCTCCC ATCTCAGCCT OCTGAGTAGC TGGGATTACA
 84951 GGCACCCACC ACCACGCTG GCTAATTTC GTATTTAGT AGAGGGGGAG

FIGURE 3-25

10/506513

85001 TTTCACCATG TTGGCCAGGC TGGTCTGGAA CTCTGTACCT CAGGTGATCA
 85051 GCCCACCTCG GCCTCCCAAAG GTGCTAGGAT TACAGATGTG AGCCACCGA
 85101 CCCAGCTAG ATTGTTCTT AAACCATAGA TGTCTGAACCT TTTTGATG
 85151 AAATTAAATG ATTAGAGATT AGTAAAATTG TTGTATAAGA TAGTAGACTA
 85201 ACAAAATTCTT ACTAGTCTGG GTGTGGTGAC TCATGCCGT AATGCCAGCA
 85251 ATTTGGGAGG CCAGGGTGGG CGGACCACTT AAGCCCCAGGA GTTTGAGACC
 85301 AGCCTGGCA ACATGGCGAA ACCTTGTCTC TACAAAAGAT ACAAAAAATTA
 85351 GCTGGTGTGG TGCGCACACAC CTGTAGTCCC AGCTACTCGAG GAGGCTTAGG
 85401 TGGGAGGATG GCTTGAGCCT AGAAGGCAGA GGTTGCAGTG AGCAACACATT
 85451 GCGTCACCGC ACTCAGGCC GGGTGACACA GCGAGACCCCT GTCTCATTTAA
 85501 AAAAGAAAAA TTAAACCTGT CTCAAAGCTT CCATACTGTA AGGCTCTGCA
 85551 TGTCTTGATT GGATTGTGCT AATATATTG GCCAACATCAGC TCCTTCTCTAC
 85601 TGCTACTTT TGAAATCCCTG TCACCAACAT CTAAGTCAG AGTACAGTGT
 85651 TTACACAGTC TCTTCATTGT GTTTTAAGAT TATAGTCTTC TTTCTGGTGA
 85701 GGGAAAGAAG AAAATAGAAA TATGGCTTAC TGATTGGGCC ATGGCTTACG
 85751 CCTGCAATCC CAGCATTITA GAGGCCAAAG TGGGAGGATT GCTGGAAAGCC
 85801 AGGAGTTCAA GACCGAGCTTG AGTAGCAAAG TGAGACCCCTG TCTGTACAAA
 85851 AGAAACACAC AAAAAAGAAA TATGACTGAC TAAAATACAT ATAATTTC
 85901 TAATACTTTA AAATGTAAGA AGGCAAAAAA TTTCTGGCT CAAGGTGGGT
 85951 GATCCCTTGA ACCTAGGAGT TCAAGACCAAG CCTGGCAAC CTGGCAAAAC
 86001 CTGGTTCTA CAAAAAGTAC AAAAATTAGC CAGGCATGGT GGTGCACACC
 86051 TGTTGGTTCTA GCTACTTGGG AGATTGAGGT GGGAAATTG CTTGAGCCTG
 86101 GGCTGTCGAG ATCACAGTGA GCTGAGATTG CACCACTGCA CTCCAGCCTG
 86151 GGCAGCGGAG TGAGACCTTT TCTCAAAAAA AAAAAAAA AAAGGCAAAA
 86201 AATTAAATTA TTAGTATGGT AAAGTTCTG TTGGACTTAA TATGAAACTC
 86251 ATTTCTAGAA ATGATGATCA TTGCTCATAG GCTTAACCTC CTTTGCTAAG
 86301 AAAATAGAGT AGTATACTAG GAGACTTCCA GAGCTGCATA GAGCTTCAGG
 86351 GTCATCTTAC AAGACAGACA ATTTGTTGTC ATCATCAGTG TTAACACTTA
 86401 AATTAAATTAAG TGCTTATGTG CCGATACTG AAGTTTATAT ACACTTTCTC
 86451 TAATCTTAA TAATTCTAGA AAGGTATGTG TTGATCCAT TTTCAGATA
 86501 AGAAAACCTA TTCAGAGGGG AAGTAACCTG ACCAAGATA CGTTGTAGTT
 86551 GTAGAGCTGG GAATATGACT CATGTCCTGTT TTTCATAG CCCATTTTCA
 86601 CTTAGGTTCC ATTAGTTTAT TATATTTTAT AGAAGGACTT ACAGACTTGA
 86651 TTTCCTCAGC GAAGTCAGAT TACTCATTTC TTGGCACAG AATTATGATT
 86701 ATTTGTATTT AAATTTCTT TCCCTGTTGGT TTTCATTTT GAGTTTTTAT
 86751 GGAATCTGAC TTCTGATTCT CAATTTTTT ATTGTGAAAT ATAACATACC
 86801 TTCAAAAAAA AGATTAACAC ATATCTATGG TTATATAAT GATTATAAAA
 86851 TAAATACCCA GTAACTTATA TCCAGGTCAAG CAAATATTCT ACTAGTGTAT
 86901 GAGTCATTT CCATGGCAAA AGAACTAAGC TTAGGCACTA TACTCAAAA
 86951 AACTAAAAAT AAAATTTTC TAAATGTGTA TTATATCAAT GGAATAAAATA
 87001 CAAATATAAC TTACCATGTC ATAATTCCCC CCACGCTTTC CCTTCTTTA
 87051 CAGCATGGGT AGGTTCTTC TCCATGGGA TGATTTCTT TTGCTGCCA
 87101 ATAGTCAGCG TCTTCACAGA CCTATTTGGT TGTGGAAAAA CAGCTGTGTT
 87151 GGGTGTGCT GTGGATTCTG TTGGGCTCAT GTCCAGTTCT TTGTTAAGGT
 87201 AAGGACTTGG TTTCATGATC TTGCTTTTTA AAAACTGTGA GATACCTTAA
 87251 AGTTTACTT TCAGAAAATG TGCTATTAC AAGCAAAGAT CCTCCCTTTC
 87301 ATTTTTAAA ACTTTAAGCA ATATGACTTA TAAAACAAAC TGTTATCCAT
 87351 AGCAGCAAAT CAGAGCTTGA GAATTGAAAT GCTTTTTTT TTGTTAATGC
 87401 CTAAGACTTA GACATCAATC AGGATATATG TGTTCTTGG TCCATGGAAA
 87451 AATGTTCTC TTATCTTT TCTTCTATTAC ACATAAAAAT CCTAATGGCA
 87501 CTCAAGTTAT AACAAATGATT TATCTAAAAC AGCAGCTTA GTTGTAGGTC
 87551 AGTTCACTGCT GAGGCCACG GGTTACAATA AGTGGTGTGTT TAAAGTAGCT
 87601 GTTCATAGGC TTGTATGAA ATATTTTTGT TAATGAGACC AAAACCTTTGC
 87651 CATTATTCTT AACCAGGAGT GAGAATTCTT GTCTGTTCTT TAAAAAAAAGA
 87701 ACATGCTAA ATTITTAATAT ATCATGGCAA AATGAAGTGG TCCAATGTAC
 87751 CTTAAAATAA AACTTAATGT CAATGTACTT CTCTGTATC TATTAGAATA
 87801 AGGATCCCCA ACGGCTGTGCA CACAGACTGG TACGGGTCCA TGGCTGTGA
 87851 GGAATTGGGC TGCAACAGCAG GAGGTGAGCT GTGGGTGAGT AAGCAAAGCT
 87901 TCCTCTATAT TTATAGCTGC TCCCTTATTAC TTGCTTACCC ACCTGAGCTC
 87951 CACCTCTGT CAGATCAGTG GCAGCATTAG ATTCTTCTAG GAGTGCAAAAC
 88001 CCTATTGTGA ACTGTACATA TGAGGGATCT AGGTGTGACT CCCCTTATGA
 88051 GAATCTAAAT GCGTGTGAT CTGTCACCTT CTCCCGTCAC ACCCAGATGT
 88101 GACTGTCTAG TTTCAGGAA ACAAGCCAG GATTCCACT GATTCTACAT
 88151 TATGATGAGT TGTATAATTG TTTCATTATA TATTACAATG TAATAATAAT
 88201 AGAAATAAAG TGCAACATAA ATGTAATGCA TTGAAATCAT CCCTAACCGC
 88251 CCTCCCCCGG CACCATCCAT GGAAAAATTG TTCTGAAAC TGGCTCTGG
 88301 TGCCAAAAAG ATTGGGATT CCTGTATTAG AAGAAAAGAC ACAGTGCACT
 88351 GAAGAGGGAC TCACTGTAAAG GAACGGATGG GCACATAACT GCATGGAACA

FIGURE 3-26

10/506513

88401 TCTCTCCCTG CAGCTCTAGT TCTCCTTGT A GTCCCTTGC GTGGTAGAA
 88451 TAATCCTAG TTAGACAAAC ACTGATTAA TATGTAGCTC TGGCTAACAG
 88501 GAGGTGATTA AGAAGAAAAAC CTCTTAAGAT GATTTCCATC CTTTGTCTCT
 88551 ACTTTAGTGG TTTATCTTC TTTCTGCT CTTCTGTGTC CCTAGCTGTC
 88601 TTTATGCTGC TTTAGTTGAA AAGCGTTAAT GTGGCTTAA AGAAAATA
 88651 AGTCAAATTT ACATTTGACT TTTTATTTT AAATTTAA TCAACAGAAT
 88701 CCTGGTTTTT ACTCATGCC GCCCCCCACC CCCAACACA CATCCCCTCC
 88751 TCAACTCTAA ATGTAGCTC ATTCTTCTAT ATTCTTCTTC ATCTAATTAA
 88801 GAAATTCTAT TTGGATTTT AAAAATTATA TTTATTCCT TGAGAAAAT
 88851 AGATATTTTC ATCTTTAAAG TACCTTATG GGTTTTCT TCTAAAATTG
 88901 TTTTTAAAG AAAAAGTTT TATTTGAAT AAGATTCTG TAGGTAATT
 88951 CATGAGATGA TTATTTAG CAGCAACATA ATATTTACAT TATTATAAT
 89001 GTAATTAATG TTATTAATAC CTATCAGAT AGCTCTTIG ATCTGGAAGC
 89051 TTCCAGGTAC CTATGTCAG TACTTGTGGC TCTACCCTT GCCGAATGTA
 89101 TTACAACCT AGTTGGTGA GAGAGGGAC TGAGAGGTAG ACAACTTATG
 89151 TAATCTACTA CCTAGTTGT TAACAAAACA CACATACAA GCAATGTTT
 89201 TCAAAATTTT CTGACCACTG AGCAATAAAA ATTATGACAT ATATTTTGAT
 89251 GTGACCCAGT TCTGTCCTC TTTCTCTACC CTCTAAGTGA AACAAAATT
 89301 ATTGAAACCA AAATTCCTT ACTACATGTA ATATTCCTAT ATATTCATT
 89351 AAATTCGTT ATTAGCTTG CTGATCAAG GCTACTGAAA CTTGAGAGCA
 89401 AGATAACAGG GCAAGGGAA ATGTGGTATA GATTCTGAGT GTCAAGTGGC
 89451 AGGTCCATT TTCTCTCTAG CTCCAGTCT GCCTCTGAG GAAAACCTTC
 89501 TCCAACAAC TAGGTCAATC ACACCCATGT CCCTCTCTG AATCCTTTT
 89551 GCACATATGA TTGGTATCCG ACAGCCTTAC TCATTTACAT TGCACTTATT
 89601 TGGCTGCCAA AGTGTACACAA CTGGAACCAT GTGTTACTGA AGGGAAAACC
 89651 TGGAAAGTGA AAGGGTTCTAG CAGTAGTGCA AATACCATCA TAAAGCTCAT
 89701 ATACTTCACT CTGCGAGGAG GAGAAGCTCT GTGGTTTCC AACTGAGAGC
 89751 ATTACAGTAC AGTGTACCA CTGTACAGGA ACTGTATGTTCTGATGATT
 89801 TGCTGTGAAC AGTATTTTA ATATACACIT TGAAGAAGGC AGAGAGAAAAT
 89851 GTATAATAGA TTAAATTTT TTTCCTTAA ATTGTAAAT AAAAACAAAT
 89901 AAGCACTTTA AGTAAGTTAC AATTATCTGG AAAACTACTT AGGTGGAAAA
 89951 ACTGATACAG AATGAATGAA GTATTAATTT CTGTTTGTCT GTGTGTTATT
 90001 ATTATTTGGG ATAGATGTCT TGTTCTTA AGCAGACTAT GAATATCTTG
 90051 AAGGCAGAAC CACATTTTTT TTTTTTTGA GACAGGGCT CACTATTACT
 90101 CAGGCCAGAA TGCACTGGTG TTATCATAGC TGACTGCAGC CTGGATTCT
 90151 GGGTTCAAGC CGTCCCTCTG CCCAGCTTC CTGAGTAGCT AGGACTACAG
 90201 GCATGTGCCA TCACACCCAG CTAATTCAG CTATTTTTT TTTTTTTAAA
 90251 TAGAGATGGG GTTTTGAT TGTGGCAGAC TGGTCTCAAG CCATCTCT
 90301 GCCTTGGCCA CCCAAAGTGT TGGGATTACA GGTGTGAGCC ACCAACGCTG
 90351 GCCAAGGACC AGATTTTTAA TATTCCTTTC CACAATGTAT CTGGTAACACA
 90401 GTAGTTGCTT AATATGTGG CTAAACAAAG AGTGGAGATT CAGTAAAGGG
 90451 TGATCAGAGT GAGGTGAGAT TAATTTGGG AAGCTAGAA GTGATTCTTG
 90501 AGOCTGATTT GAAGGTGGTG CTAGCTGTGG ATTAATAGAG GGAGAAGGGC
 90551 ATCTCAGAGA GAGGATTGCC AACATGCCTT AATTATCA GATTCTAGAG
 90601 TTCTTATGA TTACCTCAGC ATGTTGCTAG ACTAGCATT TTATCCAAAA
 90651 TTAAATTAT TAACCAACTT TAATCTTACT TTCTAACAAA TTGTTTGTCT
 90701 TTACTACTGA TAGCTTTTC AAAAACCTT AACTAGTTT ATTCTTAC
 90751 ATAATTGTTT CAAAGAACAT AATGATATGA TCCTTATCT TCCTAACAAA
 90801 TGTGCAATTA TTGGTTAAA CTGTAAGATT ATTTAATCCA TTATCTTTT
 90851 GACACATGCA TGGCTTACA GCTTACAAAC TGGGATCACT AAAGGAATAC
 90901 ACTTAATTTA AGTCTTTCTG TAGTCAGAAT ATGATTTCTT GTGTCTTGC
 90951 ACAAACTGTA GAACAGTGCA GTACAGGGCG AAGGTGGTC TACAGCCCTT
 91001 AGGCAGCAA AAACAGGCAC AACTGCACCT CTGTCACAAAT GTTCTGACAA
 91051 TAACCTTGGG GAAAATAT AAAATGGGC CTTTCTTTT ACTACCTTGT
 91101 TTGGTAAAGTA CTTGGAAAAA CTCCATGAAA TAATTAGATT TCATAGTTAA
 91151 TTCTAACTTT TTAAAGAAAT GTTCTATGAA GACTAGTTT TTGGTTTGT
 91201 AATTGAATCA CTGTTGATTT TACCTTCTT GGCACCAACC TTATTTCTG
 91251 AGCTGTGGAG AGCACAGTTC TCACTCAGT CTGTTGCGGT CACCTGAAAT
 91301 CCACAGAAAG AGGTGGCTGA ACAAAATCAC TGATGACCTT AATGGTTATT
 91351 TTTCACATAT TCAGATTTA TTAAATACG TTTAGTGTCA CATGCTTGC
 91401 TTACTGAGTT TTCTCTCTA TTGGTTAA TTTTTTTTTT TTGGTTAA
 91451 CTTTTACTTG TAGAAAATAT GTTGTGAAC AAAAACCCAC TTATACTATA
 91501 AGATTTTATT CTACCAAGCA CACAGTAACA ATATTGAAAG CTGCTTTCCA
 91551 TCTTTCTAT TTCTTACAG TTCCATGAG CCTCTGTACCT TTACCTATGG
 91601 AATCATATTT GCCTGCGGCT GCTCCCTTGC ATACCAAGCCT TCATTTGGCA
 91651 TTGGGACA CTATTCAG AAGCGCTTG GACTGGTGAA TGGCATGGTC
 91701 ACTGCTGGCA GCAAGTGTCTT CACAATCTG CTGCTTGC TCTTAAGGGT
 91751 TCTGATTGAC AGCGTGGGCC TCTTTACAC ATTGAGGGTG CTCTGATCT

FIGURE 3-27

10/506513

91801 TCATGTTTGT TCTCTTCTG GCTGGCTTA CTACCGACC TCTTGCTACC
 91851 AGTACCAAAG ATAAAGAGAG TGGAGGTAGC GGATCCTCC TCTTTTCAG
 91901 GAAAAGTTC AGTCCTCAA AAAAAATTTC CAATTTCGCC ATCTTCAGG
 91951 TGACAGCTTA TGAGTGTGG GCAGTTGAA TACCACTTC ACCTTTTGG
 92001 TACTTTGTGC CTTATGTCA CTTGGTGAGT ATGCTCTTC ACTGATCATG
 92051 AATATTACTA TTAAATAAAG AAAAACCTCT TTGAAGAGAA AGTTAGGTG
 92101 AGTTAAAGT GGCTCAAAAC ATTATCCTGG TTGTAATTTC GTTATTCTTG
 92151 AAATGAAAGG TCTCTCAAGA CAATGTCAAG ACATCCATTA GACCACTAAA
 92201 CAGAGAGT AGTTTTCATA GTGTGTTTG GTATTTAAA AACCTGCAA
 92251 ACCAGCCAG ACACCATGGT GCCTGCTAT GGTCAGCT ACTAAGCTGA
 92301 GGCAGGAGGA TCACTTGAGC CCAGGAGTTC GAATCCAGCC TAGACAACAT
 92351 AGAGAGACTC TACCTCTAAA AATAAAATAA ATGTCCTCAA ACAAACACAA
 92401 TGTTTTTAA CAGGAAGGCT AAAATAGTGG AACAAATTAC AATCAGTATA
 92451 AAACATTGAGTAGGTTCTT TTCTTCATA TGCTTTTAT CAGGGACAAA
 92501 GCTAGCGCTA TGATTTGCT ACCATAAGTA AATTGTTTT CAACCGAAGG
 92551 GTGTAGGTA TTAGCAAAAA AGCCATGATG TTGATACAAA GAACATTAC
 92601 ATCTACTTGT GTGACACTTC TGGGAAAATG GGAATTCTAT TCAGAGGAAT
 92651 ATCTGAGAAA AGTTACTAA GATCTAAATG AGGAAAGAGA ACTATGGTT
 92701 TATAGGAAAT TAGGTTCA AGTGCTCAAG AAGTTTATAT TGTTTATTTC
 92751 TATTCTAAAG GCAAAATTCA GCTTGTAT ACTGAATAC GAATAATTAA
 92801 TGCTAGACT GGGGTTGGTG CCTCACGCT GTAATCCCAC CACTTTGGG
 92851 GGCTGATGCA GGAGTCAAG ACCAGCGTGG GCAACATAAG GAGACTTCAT
 92901 CCTAACCTGG GGAAGGAAAA AAAAAAAAGA AGGAAGAAGC AGTGTCTAAA
 92951 GTATCTGCC CTGGCAACGT TTGTTCAAAA GTGTTCAATT TGTTCTTCC
 93001 TTTTTCTT TTGCTGAA AATGTTTTA CAATTCAACCG TAAATGATAA
 93051 AAATGGCATT GGCACACATA TTGTTATGTT TGTGAACCTTG GATTTTTTC
 93101 TAGCTTACAG TCTACTTTG GAGATTTGTG CAATTCTTCT TTAGTTAAGA
 93151 AATAAGTATA AATATAACCG ATTTACGGAC TATCAGGCTA CATCTGATC
 93201 TGATAGTCCA TTTTCTACT ATTAGGAAAG TATAGCCGAA CCACTTAAAG
 93251 GTAAGTTTCC TGGAAATATAG ATCTGTTGTG ACAGGATTAA CTTAACATC
 93301 CAACCTCTT CATAGCTTCT GTAGTCAAGA GAACATTAT TGTTGCTT
 93351 CTTAAAAAGA TGAGTAGAAA TTCTTTCTT TTTTTCTT TTTTCCAGAC
 93401 AGGGTCTTGT TAAGTTGCTC AGGCTGGCTT CAAGCAACCC TCCCTGCC
 93451 GCTAGGATTA CAGGTGCAAG CCACCACACC CAGCTTAAA AAAAAAATTC
 93501 TCTTTGGTAC TACCATGTA ACACACCTAG AGAAATCATA ACTCAGCTT
 93551 GCTAATACTA GACATTCTAC AAAGGAAAG TGGTAGATGA CTGCTAGTT
 93601 ATTTGGTT ATATTTAT AATTGTTAAA TTAAATTCA ATATATTACT
 93651 TCATTTGACT TTCTACAAAC ACCAGTAAAG CAGATAAAAT AAATATTAGC
 93701 TCCAATTITA CAGACTGAAA AACAGATCTA TTGTTAATAG AGACGTTAAG
 93751 TGATTTCCA AGAATTACAT GTCACTAAC AGCAGAGCAG GAGTTAGTTC
 93801 TCTTCCACTG TGCTTACCTG GTAGCAAAAT CAGTCTACAG TCTTAATAGC
 93851 ATATTGGGC ACTTCTCTGG ATATATTAC AAATGTTGCC ATCTTATTAG
 93901 GGGAAAAATG AGTATGCCA AGGAATTAA ATAAGCATGT TATTTCTTCA
 93951 GTTAATAAA ATTTCTAGT GGAAGGTGAG TTAGACAATG TTATAGATAC
 94001 TTTTGATC AGGAGATGCC AAATCAGATG GTGCACAGAA CAATAAAAGTC
 94051 TCTGTTAATT CTGTTAATAAC ACCATGCCCT TTCTCTGCC TTCCCTTCTC
 94101 CAGGCTGTTT TTCTTACAAA ATATGTTGAC ATTGTTCTT TGAGATTTTC
 94151 TCTTTCTCAT AACGGTGCCC GTTATGCCAC CGAATGCAGC ACGGTAGAGG
 94201 AAAGATCAGA TAGCTAAATG CCATACAGGT TTAAATATCT CCTCTTTGGT
 94251 TATGACTGA TTGTTGACT TTGTTGTAAT TTAAGGTTTG AATTATGGAT
 94301 ACTTAACCCAG GAATGGGACA CTAGTTCTT CCTTATACAG GGAAAAGGTG
 94351 TCTCATATCC TTCAAAAGAC TAGTAAAGTA GATGATGTT AATTCCTACT
 94401 AAACCTTTA TTGACTGTTG AGGGGACACA TATATGAGAC GTAAAAAATT
 94451 GCTCTGAAGG AGCATAAAACCT TAGTACATGT AATTAAAAAT GGCTACAGTT
 94501 TATAAAGCAC TTTTACATAC ATTCTCTTAT TTAAATTCAGA CAACAATGCA
 94551 GTACCTGTGG TTGTTCTCTT TTATTCATG GAAGGGAAAGA CTAAGGCC
 94601 GAAAGATTAA ATAACCTGCT CAGCCAGGCA CAGTGGCTCA CGCTTATAAT
 94651 CTCACCACTT TGGGAGAATG AAGTGGAGG ATCACTTGAG CCCAGCAGTT
 94701 CAAGACCAGC TTGAGCAACA TAGTGAGATT CCATCTCTAC AAAAAGTAAT
 94751 TAAAAAAAT TATCTGGCA TTGTTGGTCA TGCTCTGGT CCCAGCTACT
 94801 TGGGAGGCTG GGGTGGAAAGG ATCGCATGAG CCCAGGAGGT CAAGGCTGCA
 94851 GTGAGCCATG ATGGTGGCAC TGCACTCCAG CCTGGGTGAC TGAGTAAGAC
 94901 CCTATCTCTA AAAAAAATTA TAAAGTATTCA TAAAGGAAGA ACAGATTGAA
 94951 CAATTTTAA TTATTTGTC TTCTCTCTT AGTGGCAGCC TTAAATAT
 95001 GGAAGGTGAA GAAATAAAGA GCCAGATGTG GTGGTACACA TCTGAGTCC
 95051 TAACTACTCA GGAGGCTGAG GCAGGAGGAT TGCTGGAGCC CAGGAGTCA
 95101 AGGCTGTGGT GTGCTATGAT TGTCGACACTG CACGCCAGCC TGGGTAACAG
 95151 AGCAAGACTC TGTCTCTAA AAACAGATAA TAAATAAAGA AGTAACCTGC

FIGURE 3-28

95201 TTGAGGTCAC AGAGATAGTG ACTGATAATT ATTACTGTAG TACTTTTATG
 95251 TAAGAGGCAG TATTGTATAG TGGTTTAAAAA GTGAAGGTC TGCGGCTGGT
 95301 GCGGTGGCTC ACCCGTGTAA TCCAGCACT TTGGGAGGCC AAGGCAGGTG
 95351 TATCACCAGA GGTCAAGGAAT TTGTGACCAAG CCTGGCCAAC ATGGTGAAAC
 95401 CCTGTCTCTA CTAAAAGTAC AAAAATTAGC TGACGTGAT TGTCTGCACC
 95451 TGTAATCTCA GCTACTCAGG AGGCTGAGGC AGGAAATCG CTGAACTTG
 95501 GGAGGCAGAG GTTGCAAGTGA GCTGAGACCG CGCCATTGCA CTCCAGGCTG
 95551 GGTGACAAGA GCGAAACTCC ATCTCAAAA AAAAAAAA AAAAGTTCTG
 95601 AAGTAAGACA GATCTGGATT TAAATTCAAG TTTTGTCT TACTAGTTGC
 95651 ATAACCTTGG GCATCCTCTG TAAGCATCG TTTCCATC TATGGAGATA
 95701 AACCCATTG TGAGAGTTG TGAGGATTAG ATAAAATGTA TGTGAAACAT
 95751 CTACCTCAGT TCTGGCATAA AAATGGGAGT TATTTAATG TAAGGCAATG
 95801 TGATTGCAA CTTGAGATAG AAGTAAATTG TGAAAGGAGA AAGATAATAC
 95851 CCATTGGAA AAGTGGTTT AAAAAGTTTC ATAGCATTGG AGTTGGGCT
 95901 TGAGCATGAG ATTTTGTGA CAAATCTGAT CTTTGATCAA CTAGGGAACT
 95951 AACTTACCAAG TTAGGTCTT TGAAGATICA GAAATACAAT GGAGTGTCT
 96001 CATTGCTATG TAAAAAATTC TAAGATCTT TTAGATTGTA CATGATGATT
 96051 TGAGAGAGA TATGTATGCT TGCTTTCAA GTGAGGTTGG AGGTTTGATC
 96101 TTCTCGTAGT TGACGTTCA AAAAGAAGAA TTAGATTGCC TCCCTGAAAGC
 96151 TAAATTACCT TTCTTTTTAG GCGTTCCAC TTTAAATCTT TTTAGAAGG
 96201 ATACAATCT TATAGATCAA TTAGATGAG GCCTAACCTT CTAAAAAACGA
 96251 TTCCCTAGTAG CAGCTGCATC AGTTTTATG AATTGCCCCCT TTGCGCTGAG
 96301 AGTTGTTTG TTGTTGTTTC TGGAATCTT TTTTGTGTTG TTTTGTGTTG
 96351 TTGTTGTTTGT GTTTGTTT TTTTTGAGA CGGAGTCITG CTCTGTCITC
 96401 CAGGTGGAG TGCACTGGTG CAATCCCCGC TCACTGCAAC CTCTACTTCC
 96451 CGGATTCAG TGATTCTCTC GCCTCAACCT CCCTAGTAGC TGGGATTACA
 96501 GGCGGCTGCCC ACACACCTG ACTTAATTTC TTGTTTTTT AGTAGAGACA
 96551 GGGTTTGGCC ACATGGCCA GGCTGGTCCC GAACTCTGA CCTCAGGTGA
 96601 TCCACCCATC TTGGCCCTCCC AAAATGCTGG GATTAACGGGT GTGAGCCACC
 96651 ACGCCCTGGCC TCTGGGTTTC TTTTTTTTT TTTTTTTTT TTTCTTTT
 96701 AACGGCTCTT CTGACTCTC TCATTTAGCT TTCAGGGAGCA TAAACTCTCT
 96751 TGGTTTTCTG CCTACCTCCA CATCACTCT CCTTAGTTTC TTGCTCACT
 96801 TCTTCTTTTCCC CCACTGACC CCTGAATATC AGCATGTOCT AGGGCTTGTG
 96851 CCCTGATCTT TTCTCCATG TATTCTACTG GTGGTTTCAT CGAGTCTCT
 96901 AAGTCTACAT ATCACGTATA TGTCATAGAC TTCAAAATTG TAATTCTGGT
 96951 CCAGACCTTT CCTCTGAATC CTCCACCAAG GCTGTATATC CAGCTGCTTA
 97001 CTAAACATCT CCACTGGGT AACTGCTAGG TGTTTCAGAC TTACCCCTGTC
 97051 TAACCTGAG GTCTGATCT TACCCCTTAA AACTTACTCT GCCCCCCAGCC
 97101 ATCCCTCATCT CAGGAGCTGG CAATTGGGCC TTTCAGTTG ATCAGACTCA
 97151 AAACCTTGGG GTCATCTTGT GCTCTTCTT CTTGACACCC ATAGCTCTGA
 97201 TCCAGTGAAG AAATCTGGT GGCTTTCTT TCAAAATATA TCCAGGATCT
 97251 GACCAACCTCT CACCATCTC ACTACTCATA CCTTAGGCC GGCTACCAAG
 97301 TACCCCTAGC CTGGATCACT GCCAGAGCCT OCTAATGGGT CTCTCTGTT
 97351 CTCTCTGCCC CGGGGGAGTT TGTTCTCTAT GAAGAAGGCC CAGGCATTCT
 97401 TTCTAAACAT AAGTCACTCT GCTCAGAATC CTTCAATGGC TTCCCATTT
 97451 CCTAAAGAGTA AAAACCAATA TCCCTACAGT GACCTACAAG GTCCCTACA
 97501 ATCTGGCCCC CACTACCTCT CGGAGCTTCC ATCGCTGTC CTGGCCCACT
 97551 CTGCTCTGCG CATTGGCTT TTAATGGGGC TCACTCTGAC TACCTGCTTG
 97601 AAACCTCTG CGTCCCCCTT CCTCTGAGTA TTCACAAACC GCTCCCTAGTA
 97651 CTCTTTCTT TTTTTGAG CACTTAATAC TTCTTAACAT TATCTATTTT
 97701 ACTTCTTTAT TGAGTCATT GTTACTATC CGTATATTAA CACGCTGCT
 97751 AGAATGTAAA CACCAACAGG GTAAAGGATCT ATTCATICA GTGGTAGATC
 97801 CCAAGCATCT AGCACAGTC CTAGCACACA CTGGGTGCTC AAATATTGTT
 97851 TGAATGACTA AATATATTCT GGTTGAGTCT GAAGTGACAC TGTATAAGTA
 97901 ATGTTCTATT TTTCATCATT TGGATCTTT AAATTCTCTA CTGGATGCT
 97951 ATAATGATTT TTTCACATTCT GTACTTCAG GACATGGGT TATTAATATT
 98001 TATTCATAC TTATTCACCA AATAAGCTA AACTAAGGAA ACCTCGGAAT
 98051 AATTGAGTAA CCAGTAATGC TGTCGGTGA TGGAGGAGAG AGTTGGTGTG
 98101 TTTTGTCTG ATTCACTTAT GCCTTGCTG AAATTTAAG ATAAATAGAA
 98151 GAAATTTCTG GTCCCTCAAG TAACTGTGTC TTCAGTACCC ACTGAAAAAT
 98201 CTCACAGAGT CTGGAGTGGT GTGTTAAGA ATAGGATGCA GGATGCGAGAA
 98251 CCATAACCAAG GCCTCAGGTC TGCATAGCTT TGTCGGAGCA TTGAGCATAG
 98301 GGCCTCGTGA GATAACTGAT AAATGCCAA TATGACAATG ATAAATGCCA
 98351 AATATGACAA TGATGGTAAAC TTTTCATCATT GGCAATGAAAT GCTCTATCTC
 98401 TTACCAAAAA TGATGGTAAAC TTTTCATCATT GGCAATGAAAT GCTCTATCTC
 98451 CAATCTGAAG CTGATGATGT AGTTTCAGTT ACTCTCATCT CTCTCCCCCTG
 98501 CTACTCAGAT TGAAAATCG CTACTTAGTA CCTGTGTCT TTGACTCTAG
 98551 ACCATATCAT TGGGTCAAAT TTCAAGTTTT AAATTTAGA TCCACATGGT

FIGURE 3-29

98601 TCTCTGTCAA GAAGATGACT GACTCATATT GAAATCTGTA AAATATGTAT
 98651 TCATTAGCCT GTTTTTAAA AACTCCCTTA TAAGTGGGTT GACTTTGTGG
 98701 CAGATAGTAA TTGACTGTTC TCAAAAGAAA CTTGACCTG GTAGGAAGAT
 98751 CCCATTACCGTGATGCTATG GTTCAGACAGACAGATCAT TTGCTTGCTA
 98801 GCAGGGCAATTAGGTGACT TCAAGTCCAC TAGTAATTGG AAATGATTTT
 98851 TTTTTTTTTTGAGACTGAG TCTCATTCTG TGCGCCAGGC TGAGGTGCAG
 98901 CGGCATGCTCTGGCTCACT GCAACCTTCA CCTCCCTGGGT TCAAGGGATT
 98951 CTCTCTGCTCAGCCTGGGAGA GTAGCTGGGA TTACAGGTAC CTGCCACCAC
 99001 CCCTGACTAA TTTTTGTATT TTTGGTAGAG ATGGGTTTCA CCATGTTGGC
 99051 CAGGTGGTC TCAAACTCTCTGACCTGAGGT GATCTGCTG CCTCGGGCTC
 99101 CCAAAGTGCT GGGTTATAAGG CATTAAACAC CGCCCGTGGC CATGAATTGT
 99151 ATTTTTAACACAGAAATGAA AATTTGAGAC TAATAAGTCA GTACAGGGAG
 99201 CATGTAAACCCTGAGGTA TTTTTAGCT TTGAGTAGTG CCAGATGCTG
 99251 CCAAGGGTCA ATCAACACTG GAATGTAGCT ATTAGACCTT GCTAGGCAGA
 99301 GCACCTCCATTACACTGTG GTCAAGGAGCAGTACTGCT CCAAGGCCAGA
 99351 GCTAAGGGCG CTGAGCCACG CAAATAGAA CAGCATACAA GCCTTCATCT
 99401 CTCTGTGGCT TCCCTAGAGG GAGATTCTG TAACATTTGC CAAGAATTGA
 99451 TTATGTGTCA AGCACTTCCC CAAAATCTCA CAGAAGGACCA ACAAGGATGA
 99501 GTGTAATAAA TAAACATAC TTAGAGCCAA GGAAACAATT CTGCAAAGCT
 99551 GTGCTTGTTCAAAAGCCATTG CATTATGCT TAAAGCTGGG ATTGAAACAC
 99601 AGGTTTCAGAACATATGTC TGAAATATAC TCTTTTATG AAGGAGTCTG
 99651 CATTCCTTCA TTGCTTAATCC AGAGATAGGA GTGCTGCTAT TTTCAGCCAT
 99701 ACTGGGCTCA CACCAAAAGAT TGCTTTGCAC GTTTCCTCTC TGTTCTCTCA
 99751 GAACGAAGAA CAGAGGCCAT GTTGGAGCTGT TCCAGCGCTC AGAGCATGCT
 99801 TCACAGCCAG GGAGAAAAACT CTGGAGGAAA CCAGCTTTTG TTTTGTATA
 99851 ATTAATGGGA ATGAGAAAAAT ATCTATAACCC TTATTTTCAG CCCAACCTTC
 99901 TCTTTGATCTCAAGTACAT GTGTAATATG AGAAAACGTGA GCCATGCGAG
 99951 TTACTTTCA CAACTCTGTA CAAGCAGAAC ATGGACCATA CATAGCTTG
 100001 TGTTCAATT TGTCTCTAC AGTAAACATT AAGCATAACA GAAGAACAAA
 100051 AATGGACATG TACAAATTAA TAGCAAGATC TATCCTTAT TTGATTAACA
 100101 TAAATACAT TGCAGGAAAAA TGGAAAAAAGG TAAACTGCTT GAAATTAGT
 100151 CACATATAAA CGCTCGAGG CCACTGGTGG ATCATTAGTC TCTGAGAGA
 100201 GCTCTAAAGA ATTAGTGTGT TGAAAACCTG TTCCCTCTG TTAATGTGTA
 100251 AATTTCACCA GTGGGTTTTT TTTTTTTTAA AGACAGGGTC TCACTCTT
 100301 GTCCAGGCTG GTATGCAGGG GTGCAATCAC ACCTCACTGT AGCTTCGAC
 100351 TCCCGGACTCAAGCAATCCT CCCACCTCAG CCTCCCAAGT AGCTAGGAC
 100401 ACAGGTGCAACACACATGGCTAATT TTAATTTTT TGAGAGATG
 100451 GGGTTCTCAC CACATTGCCAGGCTGTCT CAAACTCTG TGCTCAAACAA
 100501 ATCCCTCTGC CTTGGCTCCC TGCCAAAGCA CTGGGATTAC AGGTGCAAGC
 100551 CACTACATCT GGCCTTCACT AGGTTTTCA TTTTGTGGG CATGTTCTC
 100601 AGGTTTATT TGATAAAATG CAGTATACTT TGAATCATCT CAAATTCT
 100651 TTCTAATATG GACATTGGCA TGTCCTAAAT CCTGGACTA ATAATCAAAT
 100701 TAAAGTTGT TCAAGTTGA GGAACCTAAA TTAGCCAATT AGATAAGGGT
 100751 CCTTTCATGT TTTTATATCA ACTAGAAAAT AAATTGTTT GATATGGGAT
 100801 GAATAGAAAAT AGAAATCTTA ATTTGAAGAA TCTTCCCCCTT GTGAGGCTAT
 100851 ACTAAATGGCTTTGCTGTA TATTACAAAG GTGCTTTGG GTTGTGGAGA
 100901 GAGTTGTCTG ATCCATTGAG AGTACATTTC TTACCTCTAA CATCTAGGGC
 100951 ATCTTTGGG AGAAGCCCTT GTAGTCACTA ACTCTAAGGA TCACTAGAGCA
 101001 TAAGGGTAAG CAGGCCCTCT TATGTATTCA TGCTATCAGG AAGGGTCTT
 101051 AGCACCCAAA CAAAGTTCTA GGGGCTGTAC ATTGCTGTATG TGTAAACCT
 101101 CAGCTGCCCCA TGTAGCATCT ATTACCOCT ATGCTTCTCCT CACTTTCTAT
 101151 CCCTATCATT ATATCTCTGG CTCTTTGCC CCTCTCTCT TGGGAGCTT
 101201 ACTTGTAAATT AGAAAGTTTA TATTCCTCTA TAACATATTG TAAAAGTGCT
 101251 CATTAAAGGAGCAATGCCACA CCAAATTGGA GGTGTATAAT TGCAAAACATG
 101301 GAATCCCTAT ATCTCTGTAA TGCAATCCCT GTATCTCTGT ATCCATGTTA
 101351 AATTGAACGT ATGCTTTTTT GAAGTAAAT GGTAAAGAACAT GTGGCAACAT
 101401 CTAGCTTCA GAGCATAGTT TAAGATTTT GCCAACTCTT CCAACCCATG
 101451 CAATGGTGTG CTTTGGAAAC CACAGGTTTC TTTAGACAA ATACAACATT
 101501 TATTTCGGCCTT ATTCTTTTTT GATTTAACAT TTTAGTTAAC ATTNTTATT
 101551 ACATTTTGTCTACAGATG CTTCCACATT ATCTCTCTT GGAGTCTCAG
 101601 GACCACTGTG TGAAATGGGC AAATATCAGGG CTCTATCTA GCAAGAAAAG
 101651 AACAGATTGGGGTGGCGAACAACTCTG TGAGGGTTGC AAGGATGGTA
 101701 CATGGTGCAG CCAGGGCTTG AGCTTGGGTCTTCTTAAAG TGTTGGCTTT
 101751 AAATAAAATA CTTAAGTGGCTGCCAAAGAA GTATAACATT AACTTAGGAC
 101801 CTGAAAGGCA TTGTCACAGAT CAGGTAGTTT CACTCTCTCCT
 101851 AAAAGGAAAGGAA AGGTAAGGGA AGGAAGGCAT GGAATAGTTA AGTTGCTTGC
 101901 CAAAGCCAC AGTTATAAAA GTAGCAGAAC TGGGTGTAAAT ACCCAAGAAC
 101951 ATCCATGGAA AATAATGGA AGCTTATTAC AGCCCGAGCT GTAAATATGT

FIGURE 3-30

102001 ACATAGAAAC AGAATGTGTA TGTAGAAAACA AAATTATTAG AGGAGTGAAA
 102051 TTAGTTCTG TCTTAACCCCT GGTCAACTCA TAGGGTTCAT TTCCCAATCA
 102101 GGAGGTTGCT TTGCCATTTC GACATGATCC ATTTCTCAG AGTTGCCAAG
 102151 AGCAATTGCA ACTGGCTTTC TTGTCTTCT TTCATGGATC TATTTGGAGC
 102201 TCAGGGACAA GTTGTATG CGGCAGATTG TCCCTGACAA TGCAAGGCTC
 102251 ACAGTAGTAT CCTTATAAAC CAAAGTCAC TGACACTGG GCCAGGAATG
 102301 GGCTGCTGAA GTGTACCTCT CTTCATGTT GTTGGTTA TCTTGTG
 102351 TTGGTTGTG TTATCTCTG TCACTATAAG GTTCTGACAG AAGCAAAGTC
 102401 TTGGCCCG TTACATGTCC CGAGCCTGGT GGATGATGGT TACAGAGTGC
 102451 TGGAAACTTT TTATTTATT TAAATGGAG TTACGTAAC GAAGAGTTGC
 102501 CCTATCTAG TCAGCACTGC AACCAATTAA AATAGAAAGG CTTAAATAT
 102551 TAATTTGTT TTTAGCTAG AGTCCTAAAT ACTAGGGTTT AAAAGTTCA
 102601 TTTACCTCT CTCTCCCTCT CTCCCTCTCT CCCTCTCTCC CTCCCTCTCT
 102651 TCTTCTTCC CTCCCTCCCT TCTTCTCTT TTCTTCTTTC TAACTATGC
 102701 AGAATGCTTT GCTACTTTGC AGAATGCTTT GCTACTTTGC AAAATAAAGA
 102751 GTAATCACTT TGCTTTCTC TCAAGACTTT CAAATTTAAG TAATTTGTT
 102801 TTTCTATTT TCATTCAAAA ATAGGGTTAT AACATTTCT TGACACAAGG
 102851 ATATATATAT ATATTTAGAG ACAGGGTCTT GCTATGTG TGAGGCTGGC
 102901 CTGAACTCC TTGGTGTCAAG TGATCTCTC GTCTCAGGCT TCCAAGTGC
 102951 TGGGATCACCA GGCATGAGGC ACTGTACTCA GCCTTATTA ATCTAAATAT
 103001 GATAATTTAC CCACTGAGAT TCATTTGTC TGATTAATT TACTCTCAAT
 103051 CCCTATATGT ATTTCTGTA TTTTGTGTT TGTTATGTGG CCTGGAAATG
 103101 TTTCTTTAT TCATTCATTIC ATTCCCTCG CAATTAACCT CAAAAAAGGC
 103151 TATGAAGATA TTTATGCACA TATACATTTC ATGATTCAC TCTCATGGTA
 103201 ACCTTTATA AGGAAAGCAG TGCTAATAGT GTTCTCTA CTAATAGATA
 103251 AGAACATTGA GGCTCAGAGA GTTTTAAAG GTTGCCTAA GTTGCACAG
 103301 TTAAGTAACA GAGTTGCCAT TAGAATAGAT TTCCAGTTA TTCTAATGGC
 103351 AACCTTAATT ATTTGTTT GACTTGCTCT AATTATAAT CAGTTAAACA
 103401 GATTCAAGCA TTICATTGAG TATCTATTG TGCCATAGA CATTCTAGAT
 103451 GTGGGGATAC AATGCTAAGA ACAGATACTT TCTCATAACAG AGCTCAATAA
 103501 ACAAGTAAAT TCATAAAAGAA ACAAAAGTAGT TTCAATAG TGATATTTTC
 103551 TTCAAAAGAA ACAAAATTGAG ATGGAAGGTG ATGGAAGAG ATGGAAGAG
 103601 ACAACTTTGG CCAAGTCAGGG ACAACCTCAT TGAAAAGCTG ATAGTAAGTA
 103651 CATCCTTTGG GTAAAGGGTA GTATAAGGT CTGGAAAGGT ACAAAATAA
 103701 GACAGCTTC TATTGCCCTT GGGAGGCCA TAACAGAATT TCTCAAGTCT
 103751 CTAAGGCCA TCAAGAGTTG GATTTTTTTA TCAACCTTAT TTAAATTTGA
 103801 TGTATTATTA AAAATCTGCA TATCAAAAT GAAAATGTCT TGCTACTTT
 103851 GCTGTAGGAC CCAATCATTG TTTTTCTTC ATATAGCA TTAATCTGTT
 103901 TTCAACTGC TAATAAAAGAC TTACCTGAGA CCAGGTATT TAGGAAGAAA
 103951 AAGAGGTTA ATGGACTTAA AGTTCCACAT GGCTGGTAG GCTTCACAGT
 104001 CATGGTGGAA GATGGAGGAG GATCAAAGGC ATGCTTACA TGGTGGCAGG
 104051 CAGGGGAGTA TGTGCAGGGG AACTGCOCTT TATAAAACCA TCAGATCACA
 104101 TGAGACTTAT TCACTGTCAC GAGAATAGCA CAAGAAAAAC CTGTOCCCCT
 104151 GATTTAAATTA CCTCCACCA GCTTGCTCCC ATGATATGTG GGGATTATGG
 104201 GAGCTACAAT TCAAGATGAA ATTGGGTAG GGAACACAGC CAAACCATAT
 104251 CATTCTGCC CTGGCTCTC CCAAATTCA TGGCTCACA TTCTAAAAT
 104301 AATTATGCC TCTTAATAGT CCCTCAAAGT CTAACTCAT TTCTAGCTTA
 104351 ACTCAAAAGT CCACAGTCAC AAGTCTCATC TGAGACAAGG CAAGTCCCCT
 104401 CTGCTTATGA ATCTGTGAA TGAAAGCAA GTTGTACT TCTCTAGATAC
 104451 AATAGGGTA CATGCATTGG GTAAATACAC CCATTCCAAA TGGGAGACAT
 104501 TGGCCAAAAT AAAGGGGCTA CAGGCCCAT GCAAGTCTGA AATCCAATAG
 104551 GGCAGTCATT AAACCTTAAA GTTCCAAAAC GATCTCTT GATTCATGT
 104601 CTCACATTCA GGGCACATTG ATGTAAGAGG TGTCTCCCA TGGCCTTGGG
 104651 AACCTCTGCC CCTGTGGCTT TGCAAGGTAC AACCCCCCTT CTGGCTGCTT
 104701 TCATGGCTG GATTTGAGTG TCTGCAGGTT TTCCAGATGC ACAGTGTAGG
 104751 CTGTCAGTGG ATCTACCATC CTGGGTCTG GAGGACGGTA GCCCCCTCT
 104801 CATACTGCAC CTAAGCAGTG CCCCCACTGGG GACTCTGTGT AGGGGCTCCTA
 104851 GTCCCCACATT TCCCTCCAC ACTGCCTTAG CAGAGGTTCT TCTAGAGGT
 104901 CCTGGCCCTG CAGCAAACCTT CTGCGTGGAC ATCCAGGCAT TTCCATACAT
 104951 CCTCTGAAAT CTAGGTGGAG GTTCCCAACC TCAATTCTG ATTTCTGTG
 105001 ACCCGCAGAC TCAACACCAT GTGGAAAGCTG CCAAGGCTTG GGGCTTGAC
 105051 CCTCTGAAAGC CATGGCTGA GCTGTACCTT AGCCCCCTTT AGCCCATGGCT
 105101 GGTGCAGCTA GGATACAGTA CACTAAGTCC CTAAGCTGCA CACAGCAGGG
 105151 GGGCCACACA GCAAGGGGAC TCTGGGCTG GCCCATGAAA TCACTTTTC
 105201 CTTCTGGGCC TCCAGGCCTA TGATGGGAAG GGCTACGTG AAGGTCTCTG
 105251 ACATGCTTGTG GGGACGTTT CACCATTTGTC TTGCAATTAA ACATTTGAGCT
 105301 TCTTGTCACT TATGCAAATT CTGCAAATGT CTGAGCTGG CTTGAACCTC
 105351 TCCCCAGAAA ATGGGTTTTT CTTTTCTTC TTCTTCTT ATTATTATAAC

FIGURE 3-31

105401 TTTAAGTTAT GGAATACATG TGCAGAACGT GCAGGTTTGT TACATAGGCA
 105451 TACATATGCC ATGGTAGTTT GCTGTATCCA TCAACCTGTC ATCTACATTA
 105501 GGATTTCTC CTAATGCTAT CCCCTCTGTA GCCCCCGACT CCCCTGACCA
 105551 GCCCTGGAAT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTGATTGTT
 105601 AATTOCCACT TATGAGTGAG AGCATGTGGT GTTTGGTTT CTAATCCTGT
 105651 TTTAGTTCC TGAGAAATGAT GGTTTCCAGC TTCAATCCATG TCCCTGCAAA
 105701 GGACATGAAC TCATCCTTT TTATGGCTGC ATAGTATTCC ATGGTGTATA
 105751 TGTGCCACTT TTCTTCTTAC CAGTCTATCA TTGATGGGCA TTGGGGTTGG
 105801 TTCCAAGTCT TTGCTATTGT GAATAGTGCT GCAATAAAACA TATGTGTGCA
 105851 TGTGCTTTA TAATAGAATG ATTATAATC CTTGGGTAT ATAACCAGTA
 105901 ATGGGATTGC TGGGTCAAAT GGTTTCTG GTTCAAGTTC TTGGAGGAAT
 105951 TGCACACTA TCTTCCACAA TGTTGAACT AATTACACT CCCACCAACA
 106001 GTGTAAAAGC GTTTTATTT CTCCACATCC TCTCCAGCAT CTGTTGTTTC
 106051 CTGACATTTT AATGATTGCC ATTCTAATC GCGTGGAGATA GTATCTCATT
 106101 GTGGTTTGA TTGCAATTTC TCTAATGACC AGTGATGATC TTTTTTTTA
 106151 TATATATTG TTGGCTGCAA AAATGCTTC TTTTGGAAAAG TGTTCATATC
 106201 CTTCACCTAC TTGTTGATGG GTTGTGTTGT TTTTTCTG TAAATTGTT
 106251 AAAGTTCCCT GTAGATTCTG GATATTAACC CTTTGTGAGA TGGATAGATT
 106301 GCAAAATTTC TCTCCATTTC TGTAGGTTGC CTGTTCACTC TGATGGTAGT
 106351 TCTTTGCT GTGAGAACG GCTTGTGTTT AATTAGATCC AATTGTCAA
 106401 TTGTTGGCTT TGTTGCCATT GTTTTGGTG TTGAGTCAT GAAGTCITTG
 106451 CCCATGCCCTA TGTCCTGAAT GGTATTGCT AGGTTTCTT CTAAGGTTT
 106501 TATGGTTCTG TTGCACTGTC AGGCTGCAA TTTCCAAAC TTTATGCTC
 106551 TGCTTCTCT TGAACACTTT GCTGCTTGA AATTTTTCC ACAGGATAAC
 106601 CCAAATCATC CTCTCAAGT CAAAGTTCCA CAGATCTCA GGGCAGGGAC
 106651 AAAATGCCAC CAGTCTCTT GTATAGCAAG TGTGACCTT ACTCCAGTTC
 106701 CCAACAAATT CCTCATCTCC ATCTGAGACC ACCTCAGAAC CCATTCAACA
 106751 GGTCTCTAGG AAGTTCCAAA CTTTCTACA TCTTCTTTC TTCTGAGCCC
 106801 TCCAAGTCTC TAGGAAGTTT CAAACTTCC CACATTTTCC TATCTTCTC
 106851 TGAGGOCCTCC AGACTGTTCC AACCTCTGCC TGTTACCCAG TTCCAAAGTT
 106901 GCTTCCACAT TTGTTGGTAC CTTTACAGCA GCACCCCACT ACCCAGTACC
 106951 AATTACTGT ATTAGTCTGT TCTCATGCTG CTAATAAAGA CATAACCGAA
 107001 ACTGGGCAAT TTATAAGAAA AAGAGGTTA ATGACTCAC AGTTCCATAT
 107051 GGCTGGGAG GCCTCACAAT CATGGTGGAA GGTGGAGGAG GAGCAAAAC
 107101 ATGTCTTACA CGGCAGGAGG CAAGAGTGTG CATGCAGAGG AACTGCCCC
 107151 TATGAAACCA TCAGATCTCA TGAGACTTAT TCACTATCAT GAGAACAGCA
 107201 CAGGAAAAAC CCACCCCCCAT GATTCAATTA AGTCCCCACCA GGTCCCCCT
 107251 AGGACACATG GGGATTATGG GAGTTACAAT TCAAGATGAG ATTTGGATGG
 107301 GAACACAGCC AAGOCATATT ATATACTTAA TTAACACTT ATCTCTCTA
 107351 ATAATACACT TGTTCTCATG TGTTTATTCT TCTTATTACC TTTTTTTGA
 107401 GATGAAGTCT CACTATGTT CCTAGGCTAG TCTCAAATC CTGGGCATGA
 107451 GCCATCCTCC CACATGCCCT CCCAAAGTGC TGGGATTACA GATGTGAGCC
 107501 ATCACTCTG GTCTCATGTG GTTATTACAG TGAATGATTA AGACACCTTC
 107551 TCTCCTTCAC TTGTTGCTA CTTTTCTCA GATTTTTTC AATGATGCT
 107601 ATGTTTTCT TGTGTTTTCT TAGCTTTCT AACTTGCAT TTATTTCT
 107651 TCAGATCTCA ACATCTGCTG CAATTTGACT GTTCAGGTTA GTGACAATT
 107701 GCCCATTTAT CAGTTTGTG CCTTAGGCAG TATTCAACAG CATTCTCTA
 107751 TTGAGATGA ATAAGGATCT TTATTTATCT GACCACTTGT TTACTCATTC
 107801 ATGGGGACAT TTAATATTTA CAGAACACTT TCATCAAAC AAGCCCTGTT
 107851 TTCTTTCTA AAATATAATA TACTAGCAT GGAACCTGAC AGAAGAGGTA
 107901 ATAATACAGA AGAAATCTAG AGAACTGATC ATGGAGAAAT AATTAAACTA
 107951 AAACAAAGCT GCTGCTTATA GTAAGGTTAGA CCAAGTTTGT CCTGTGTTCC
 108001 AAATTATACT TAGCCAAAAA TAAATATTTA TAGATAATTG AATAGTAGTT
 108051 TTGAGAAATG ATTCTATGGT TACTCAGGGG TGGAAATTAT CCCCTGTAATG
 108101 TAGGCCCCAA ACTTTCTAAA TATTTATAAT TTGAGGGGA GAAATAAAATC
 108151 CACAAACATT TGAATTTAAC TTAATTGAA AAACAGCAGT
 108201 AGTGTATTT TGTTAGGCC TTATATTGGG TAATAGTC TATGTAAGTA
 108251 TGGGAAAGGC TGGTAAAAC TGTGATTTC TCTACAAAAT ACATGGTAC
 108301 ATTGGGGAGT TTGTTGTTGGG AAGTGTCTA ACACCTCAGG AAATGCTAAG
 108351 GAAGAAATGG GTAGGGTAGA CTGAAACACTC CACAAGGGTA GGGAGAGCGT
 108401 CTTCTCTTCA TTGCTCTAGC CCCAGCACCT AGAATGTGCC TGGCACTCAA
 108451 TCTTTCTTT CCTTTTTAA CTGATTTCAG GTTGTGTTTA TAGGCTAGCT
 108501 GAGTTTATAG GCTGGTAGAG TACAAGGTCT ACTAATTCTCT CTACTCATGA
 108551 CTACTTACT TTCTAATAGC ACTTTATGTT CTCAAGTGC TTTTTCTT
 108601 TTGTTCTTCAA TGTATAATAA GGTGAGAACCA GTTGTATCTC CATCTTGAG
 108651 GGAGAAGAGT TAGTTAAGAG ACTTTCTAG GTCACACACA TATAGTTAAT
 108701 GACAAGGTGA GGTAAACCA TTAATATAA GAAATAAAAG TGTTTATAA
 108751 ATTATCTAGA GTAGTTCAA TGTGAAATAA CTTAAAGGTA TGGAAATGGA

FIGURE 3-32

108801 TGCCAAGAAG TATAGTCAGT CTTGCTGGAG TAAAATAATG CCCAGTGCTT
 108851 TGTGCCCTCT CCCAGCTGCT GCTTCCAGAA GAACGGGGTG TCTGAGTGTTG
 108901 AACATCACCC ACAAGTAGG TTAACAGATA TCCACGCCCTC TCTTGACCCA
 108951 CATAACATATC AGTGGGATT AGAATGCTGC CACATATTGA TGATTGAATT
 109001 TATGAAGCAT ATAATATCCT CAATAATAAA CCAAGTGCC CTGTCCCAAC
 109051 TTGTTATCTC TGCTTCCTG AACACATGTT TCTTTTATA TGCTCCCTAC
 109101 TCCCTCAGTG CTCTCTCAGG GACTTTTCAG TCCCTGACCT TGCTCTTTTC
 109151 AGCATTTCTC CAGAGGACAA TTCTTAGCTT CCTCTTGATT CCTCAAGCAT
 109201 TAATTGCTTT TTCTGCGGAG ATATTTCTT GCTAGGCTCT TGAGGCGCTCA
 109251 GAGCTGTTCTC AAATTATGCA GTGGGAATTG CCCAGGATTA GGAATCACCT
 109301 AATGTCCCCA CCACCCCGC TTCTTGTA GGCACTTC CAACTCTGCA
 109351 CCCCTATACC TTCACAGCAA CCCTGTTGAC CCAAAGCAGT GTCATACTCG
 109401 GTGCCCTCTT TTCTCTCTG AAATAAAATT CCTAGATAAG AAGACCTCTA
 109451 TATTOCAGGC TTGCTCTTG ATTTAGGGA AAAAAGAA AACTACCTAT
 109501 ATACATAATG TTTTAAAAA TCAGTAATGT CCCACTCGTT ACAGAAAGGA
 109551 GAAATAAAAG AAGTAAGTTA ATGCGCTGGGA TACGTGCTAC AACATGGATG
 109601 AACATGAGG ACATTACACC AAGTGAATA CTCCAGGCAC AAAAGCACGA
 109651 ATACTGTATG GTTGGCTTA GATGAGGTAC CCAGAGAAGT CACATTCTA
 109701 AATACTGAAA GTTGTATGGT GGTTTCCAAG GGGGGGGGG AATGAGGAGT
 109751 TATTTAATGG GCACAGAGTT TCAGCTTGAG AGGAGGTGGT GACAGTTGTA
 109801 CAAACAATGTA AATGACTTA ATATAGTACA TTAAAATGG TTAAAATGGC
 109851 AAATTTTATG AAATAAGGAAT TTATCACGAT AAAAATTAA AAAGTAAGAA
 109901 AAGTTACTGC TTGGGGAA GTATATCAA AAAATAAAA TAGTCCCCAC
 109951 AAATTTCCAA AACAAACCTA ATGAGGTGTT GCTGCCCTAA TGGTGAACCA
 110001 AATTGTGAAC CAATGTGTA GTTTGAGAC TGGGAAACTG ATGCCCAAGA
 110051 TTTTAGCTC ATAAGGAGT AGAGTTCTA ATTGACTCC AAAGACATT
 110101 CTTTCCCTAC CATGCCAAG CCATCTGATT CCCAGTCCAA AGAAGTTTC
 110151 TCTCTGCTCT GTAGGTGOC TTATCCAGA GTACACAAGC TTCCATTTT
 110201 CTTATCTGTC CTCTAACAGG GGTGTGGTCC TTTTCTCTT GAACACTGAC
 110251 TGATAATTA CCAGACAAA CAAACATAT TTAAAATATA GGCAGTCCTC
 110301 TACATCCAAG GTTCCACATC CTTGGATTCA ACCAACCATG GATTGAAAAT
 110351 ATTTGGGGGA AAAAAGAAC ATAAAAAAC ACTGGCCTGG GCAGCATAGT
 110401 GAGATGCCAT CTCTACAAA ACATTTAAAT ATTAGCTGAG CATTCCAGCA
 110451 CTTTGGGAGG CTGAGGCAGG CAGATCACCT GAGGTCAAGA GTTCGAGACC
 110501 AGACTGGCCA ACATGGCAGA ACCCTGTCG TACTAAAAT ACAAAAATTA
 110551 GCCAGGCATG ATGGCAGCTG CCTATAGTCC CAGCTACTCA GGAGGCTGAG
 110601 GCAGGGAAA TTCTTGACG CCGTGAAGCA GAGGTGCGAG TTAGCCAAGA
 110651 TCCCACCACT GCACCTGAGC CTGGGTGACA GAGTGAACCT CTGTCCTAAA
 110701 AAAATAAAA TAAAATAAA TAAAATTAG CTGAGCATAG TGCCATGTGC
 110751 CCATGGTCCC AGTACTCTAG GGGGTTGAGG TGGCAGTGGAG CTGTGATCGT
 110801 GCCACTGCACTC TCCAGCTAG GCAACAGCGA GACCCCATCT CAAAACAAA
 110851 ACAATAAAAC AGAACACAGA TTAAAACAA AATACAGGCT GGGCTCACTG
 110901 GCTTATGCC TGAATCCCAG AACTTTGAGA GGCAAGGTG GGAGGATTGC
 110951 TTGTGCTAG GAGTTTAAAGA TCAGCTGGG TAACACGGCA AGACCAACATC
 111001 TCTACAAACCA ACAAACACAG GAGACTATAC TTTCAGGGAC CATTTCCTGG
 111051 GATCATAGTT TTGTTACTAGA GAAGTTCTC TTGTGAGAGC ATTGAAATAT
 111101 AAAATGCAAG AATAATCATT TACATAGCAT TTACATTGTA TTGGTTATTA
 111151 TAAGTAATCT AGAGATTAAT TAAAGTATAC AGGAGGATAT ACATAGGTTA
 111201 CATGCAAATA CTACACCATTT TTATATAGGG GACTTGATCA TCCATAGATA
 111251 CGGGTATCTG AGGAGGTGTT GGGTTCACTT CTCCACGGAT ACCAAGAGAC
 111301 TAATGTTAAT TTCACTTCCC CAACCTCCAC ACCAGAACTC TGAAAATAAGA
 111351 ATAAGAAAAG GAGCAGTTGG GATAGACAAT ATCAGAAGTA TTGTTGAAATG
 111401 ATAACAGTGG AAGGAAAGCT GATCTAGGCC TACTCAACAA ATTTTAATCT
 111451 TCATTCCTGGT AAAACAAAT TAGATTCTAG GGTGCAAATT TGAGCCAGCA
 111501 ATTAGATGGC TCTTCTGGG ATAAAAAAAAG GACTGAACAT CATGCCCTTC
 111551 AAAAGACTGAG GGAAAGAGAT AGATAGGAGA CTTTGGCAAA GTAGCACTT
 111601 AGCCAACATC ATTAGCTAA ATCTTAGTGA AGAGAGGTTA GAAGAAAGGT
 111651 AGAATTTCA TGGAAGGATC CATTTCCTT CACTTCAGAA TTAAGGGAAA
 111701 AATTAGGAAG CTGATAAAGA ACTAATGGCC TAATTTCTT GTTTCTTCA
 111751 AAAATCAAAT CTTTAAGTT AAATTTCAAT AACCACAGA AGAAGGTAGA
 111801 ACCAATTTTG TGAATTACA AAATACCTGC TTATTGACAC TATTGCGAAG
 111851 GTCTTAAAT AAGTTATCAA GTTACCTCAG ATCCAGTGA TTAAAATAAT
 111901 GCTTCTGAA TTGTCTTT TCTGTTTAA GAAGAAGCTG TATTAGGTT
 111951 TTGTGTTCTC ATAAAGAAAT ACCTGAGGCC GGATGATTTA TAAAGAAAAG
 112001 AGGTTAATT GGCTCAGGAT TCTGAGGCT GTATAGGAAG CATGGCCCCA
 112051 GCATCTGCTC AGTTTCTGG TGAGGTCTCG GGGAGCTTT ACTCATGGCG
 112101 AAAGCAGAGT GGAAGCAGCA GGTCACTTGA TGAATTGAG AGCAAGAGTA
 112151 TGGGTGGGGGA GCTGCCATAC TCTTAACCCA ATCTCTAGTG AACACAAAGCA

FIGURE 3-33

112201 ATAACTCACT TATCACCAAG GGAATGGTGC TAAGCCACTT GTGATGGATC
 112251 CACCTCCAAA ATCCAGTCAC CTCCCCACAG GTCCCACCTC CAACATTGGG
 112301 AATCACATT CAACATGAGA TATGGAAGGG ACAAACATTIC AAACCATATTC
 112351 AGAACCTAT CTTAGGCTGG GCACGGTGGC TCAGGCCGT AATCGCAGCA
 112401 CTTTGAGAGG CCGAGGCAGG CAGATCATT GAGGTCAAGGA GTTTGAGACC
 112451 AGCACGGGCA ACATGGTGAAC ACCCCATCTC TACTAAAAAT ACAAAAACATA
 112501 GCTGGGCATG GTGGCACACA CCTGTAACTC CAGCTACTG GGAGGCTGAG
 112551 GCAGGAAGCT CTCTTGAACC CGTGGGAGA GTTGCAGTG AACTGAGATT
 112601 CTGCACTGC ACTCCAGTCT GGGCAACCGA GTGAGGCTCT GTCTAAAAAA
 112651 AAGAGAAGGCC TATATTAAAC TTATAAAATT TAATATCATT TCAACTAGCC
 112701 TTTTGTGGG TGCACTTGT CACTTTGGAC TATTTTCA AATTATGTA
 112751 CAGTCGTCA TCTCTTAACA ATGAGGATAT GTTCTGAGAA ATGCATCCTT
 112801 AGGAATGTC ATTGTTGTGC AAACATCATA GAGTGTACTT AGACAACCCCT
 112851 ACATGGTGA GTCACTACAT ACCTAGGCTA TATGGCATAG GTAGAGGCTA
 112901 TTGCTCTAG GCTACAAACC TGACAGCAT GTTAATGCAC TGAATGCTGT
 112951 AGGCAAGTGT AACACATGGT ATTGTTGTAT CTAAACATGG AAAAGGTACA
 113001 GTGAAAGTAC AGGATTATAA TCTTATGGAA TGCTGTAT ATATGTTGGCT
 113051 CATCTTGAC CAGAAATGTT ATTATGTAGC ACATGACTGT AATTCCACTA
 113101 TTGATTAGAG ACTCCATAAC CCACACCTAC CTGTTCAATT GCATGCACAT
 113151 TTAGCCGATA GGTGACTTTA TCACTAGATC AGTCCAAGAA TAAGTTAAA
 113201 GAGCATGTCC CCTTTTCTTG TTTTTAATA AATGAAAAAC ATGGAAGTAC
 113251 ATGATACCTC AAAGGAGCAT GAATCACAAA CAGGAGTCA CATTACAGA
 113301 GCCTTGCAA CCACCTTAT ATCTTCAAAG TGCTCTACCA AAGTATCGGA
 113351 GTCACTGAGT CATGCAGGTA GGCTGCCAAC CATGGCTGAG CCTCTAGGAG
 113401 CTGTTGTAT GACCAAGCATA GACACGGTCT GTTGTGTTCA TTCAAACTTG
 113451 CCAAGAACCA AGGATCTGAG AATGGTAAGT CTGGTGTGCC AAGAATGAAA
 113501 CTCCAAGAAA GAAACTTCAG AATCAAATT AAATTAGGC TGGGTGTGGG
 113551 GGCTCATGCC AGTAGTCCCA GOGCTTTGGG AGGCTGAGGT GGGCAGATCA
 113601 CCTGAGGTCA GGAGTTTGAAC ACCAGCTGG GCAACATGGT AAAACTCTGT
 113651 CTCTGCTAA AACACAAAAT TAGCTGGCA TGGTGGTGA CACCTGTAAT
 113701 CCCAGCTACT TGGGAGGCTG ACGCAGGAGA ATTGCTTGAA TCGGGGAGGT
 113751 GGAGGTGGCA GTGAGGCCAG ATCACACCAT TGCACTCCAG CCTGGGTGAC
 113801 AAGACCAAAA TGCCATCTCA AAAAAAAA AAAATCGAAT GTAGGTGGAA
 113851 TTAATAAAA TTTAATAAA CTAACAGATT AAACTTCA TTGTTAGGA
 113901 AGGAACAGAA CAATTTTGAA TAACTTGTGA AATATCTGGC ACAGAAATTA
 113951 TTTAGGCCA CTAATAATT CCAAATTACCA TAAAATCT AGTGATTAT
 114001 TTCTTATTTT AAGATGAAGT CTACTTTAA CTCTAAAAT GCAGGGTTAT
 114051 TTAACATGGC ATCTAAATCC AAGCTGGTT TGGTTGGAA TTCTCTAGG
 114101 ACATTTTACT AAATCTGTAT CTTATCTAA TGATGCTATG TCATAGATGG
 114151 ACTGTTTGTIT TTGTTTGTAA TCCAGGGAAA TTAAAAAAA AAAAAACAA
 114201 GTAGAAATAA AGGCTTTAA AGAATTTTA GAGTTAGAAA TGTTTCAA
 114251 ATTAGTTCT TTAAACCATT AGCCATCTCT TCTCTGAA CTCTCTTTT
 114301 TTCTGCCCT TGGTAGCTAT GAAATAATCT GCATGCCAGA AACTCTTTT
 114351 TTCCAGTCC TTTTCTATGT CTTAACAGTG CCATGCATGA TTATCTACAC
 114401 CATGGAAACC CATTCTAATG AAATGGAAAG ATCTGCTGTT TAAAAAAACA
 114451 AACAAACCAAT CACCCATGCC TCTCACAGTC CTGTTAGGOC AAAGGTCTGC
 114501 TCTCCACCTG GTCACTGCT GAGGAGGGGG CAGGTAACCTG TACCCACAGTT
 114551 TAGCCACAAAC AGAAATATCG TTGGGCTACC AAAAGATGTC AGTCTTAAA
 114601 AATGTTGGCA AGCAAAGAAA TTTTCTCTA AGCACATCTT AGAGATACTT
 114651 TAGTCTAAAG GCACAGTTGA TCAGATTTAA GAAGCTAAGA TTACATTTTG
 114701 GGGCTGGTCT AATCGATAAA TATCTATCAG TGGCATAAA GTTTTATITC
 114751 AGTGTGTTCT GGTGAAAGG GATTAATTAT ATGACTCAA GTCTATGGAG
 114801 TTGTTTCTT TCCACCTTAA ATCACCTCAC TCGGCTTGCT GTGTTGCGAGT
 114851 GCTCATGCCA AACCTCTAA GGGAGTGGCC CACTGTTTT AATTACTTC
 114901 CTCTAGCAAA AACACAGCTA GAGGAACAC AAATCGTTA AAAAGAAAG
 114951 AAAAAACAA AATAAAACTGT CTCACTTCTAT TCAGAAGATT TCTGTTCATC
 115001 CTACTTTAA GTCAAAGGGT AGTGTAAAGT TTGATTTGC AACAAACTCA
 115051 GATTATCCAT TAACCCACGC TTGCAAGGCTT TCTACTCCTT TTCAAGATGTA
 115101 CGCTATTTT TTTAAAGGC CCAGGCTTT TGAGTTTACCTT TTTCAAAAAA
 115151 GTATGTTTAG GCAGAATGGT CTTCTAGAGT TATGGAATAG CTTTCAAAT
 115201 GTGGATGGA TATTTCTTA GAATTACTCC AAAATGCAGT AAATGAGAAG
 115251 CAACAAGCTG AAGCTGCCAG TCTCTGGTAT GAATAGCAGT GAGTAAAAGT
 115301 GCTTTGAACCT TAGTGTCCGT ATTGGAAAGC AGGAAGTTGA AAGAATCAGT
 115351 TTGAATTCCA TAATGGCTGT AAATATTATG TAGCTTTAT TATCCCTTT
 115401 TTGATGTAC CATGTAATG TAAACATAC AGGCCCCCTC CCTCCCCCTGA
 115451 AGAGTTTATT CTCTAGACA TAAATGAGT GTACATGCC AGCCATTGTC
 115501 CACCCCTTC CAGTGGATG ATGTGTATCT GATGAGGAAG GACAGAGATG
 115551 AGAGAATCAA AATCATTATA AACGAATACA GATGATGACT GGGTGAATG

FIGURE 3-34

115601 AATCTTATCT CCACAAAGAGC ATAGTTAAGT GCAGCAGCAG TGGATGATAA
 115651 CTACTGGGTG GGGGTAGAGG GGTGTTTG CTCAGTTCTG CCTAGAACAC
 115701 AGTTGAGTT ATTTTAGTCC CACAGTCTCT ACTCTCTCCCT GGGCTGTT
 115751 TTGCCTGCT TTCCCTGGCT CTGTATAAGG CCTTTGTTAG CACTTTGTT
 115801 TTGTCAGTCA GCTGTTACTC CAAGCTCTC GTCAAGAAATA AAGTTACTTT
 115851 TGTGGAAGA GTCTCCAGTA ATCCCCCTC TTTTTAAACT ATGACTCCCC
 115901 AAAGATATAT AGTCTAACT GTGTGCAACCA GTATTTATC ATATTTATT
 115951 AATAAATTCC ATAAAACCTTA CATAAAAGAT ATAAACAAA AAGTACTCAC
 116001 CCCCTTAAAA GGAGGAAGAT AATGACCATC AAGGCATGGC CAAATTACAC
 116051 AGTCTTAGGA AACAGTACAG TAGGTAATT TTGGACCTTT TTGATTAATG
 116101 GCATCTTGC TTTCAGGTG TGTAACACCA CTGCACTTCA CAGGTTCTG
 116151 TAAATAAAAGT GATTTGGGT TCCCCTCTGT TGAGCATTCT TCTATCGTA
 116201 ACCATTGGG TGATGAGAAAG CTTGAGTTTC TAATGCAATG TGTTGGCTT
 116251 TATTGGAGCT GCTTTGTAAC TGTGGCACC CATTAACTT CCTCTGTGGT
 116301 TGATATATGA GAGCTAGAGG ACTCTGCTT AGCTCTTCA TCAGAACACC
 116351 ATGTGATGTC TCCAATGTC TTACACTGTG GCTCCCTGT AAGAGAGGTG
 116401 GAGAGGAGAG AGGGCAAGGC TGAGGCCATT CCAGTGAGAT GATCACTTTC
 116451 TTAGGCTACT GCCTGAGAC CTCAAACAG GATCTGTCTG TGGGCTCTAG
 116501 TGAGGGAAA GTAACCGGGC TTCAGTTGGC TGGTCAGAAA CAGTTACCCA
 116551 CGGGGGGTG TTGTTGGCTCA TGCTGTAAAT TCCAGCACTT TGGGAGGTCA
 116601 AGGGTGGAGG ATTGCTTAAG CCCAGCAGT TGAGACCAAGC CTGGGCAACA
 116651 TAAACAGGACC ATGTCACTAC AAAAATGATT TAAAAATTAG CTGGATGTGG
 116701 TGGCATGTAC CTGTGGTCCC AGGTACTGG GAGGCTGAGG TAGGAGGATT
 116751 GTTAAAGCCC AGGAGGTCGA GGCTGCACTG AGCTGTGATT GCGCCAGTGC
 116801 ACTCAAGCCT GGGCAACAGA GTGAAACTCT GTCTAAGAA GAAAAAAATGT
 116851 TTCAAGGACA GTCACTGTTG AAGATGTCAA TTAGCAAGGT TTTTTAAATC
 116901 CCCTGGAAGT GTGCAACCCA GGATTAACA GATGTTAAAG AACATAAAATA
 116951 AAAGATGAAT TCTGGGCGA GGGGGTGGC TCACACCTGT ATCCCCAGCA
 117001 CCTTGGGAGG CTGAGGCAAG TGGATCATGA GTTCAAGGAGT TCGAGACCAAG
 117051 CCTGACCAAC ATGGTGAAC CCGCTCTCA CTAAAGATAC AAAAATAAAGC
 117101 CGGGCGTGTG GGGGGGCACC TGTAATTCCA GCTACTCAGG AGGCTGAGGC
 117151 AGGGGAATTG CTTGAACCGG GGAGGCGGAG GTTCACTGAG GCTGAGATCA
 117201 TGCCACTGCA CTCCAGCCTG GGTGACAGAG TGAGACTCCA TCAAAAAAAA
 117251 AAAAAAAAAA AGATGAATTG CTGACACTTA ATACATTAG ATAAAGTCTA
 117301 ACTTATCTT AAAGTTAACT TAAACAAACT GCTCTACAGC ATAATATTAT
 117351 CCCCTGTGTA GACAGTGAC C TCTAGTATAA GCTTTAAATT GTTTAAAAAA
 117401 ATAGATTAAG TATGAAAACA TCTCTTCAAC ATTTTCAATAT CTCTACAATC
 117451 CTTTATTAGA ATATTCATT TTGTTCTATA TTCACTTCT GCTGAACCAA
 117501 AGTGCATGCC AGTCTCCAGA GGATGACAGA TGGGAGAAA TTTATAAAAC
 117551 AGCAGCAGTC ATGGACAGCC TAGGCCACAA GTAGAACATA CCAGACCTCC
 117601 TGGGTACTAC TGTCTCAGTG AGAAAGATC CAGAGATCCA GCATCACCAG
 117651 ATTCCTCAC ATACTGACCA AAGAAACTTT TTAGTTGC AGATTTGGT
 117701 GGGAAATAGGG AGGAGTATTA GAAGCTGAAG TTCTGCTTT ATTTAAATAA
 117751 TCATGGCACT AACAAAATTG GGTAAATAA TGCCCCCTCT AGGGCCAGGGG
 117801 TGGTGGCTCA TGCACTTTAG GAAGGCCAG CAGGAGATC ACTTGAGGTC
 117851 AGGAGTTTG AGACAGCTG GGCCAACCTTG GTGAAACTTC ATCTCTACTA
 117901 AAAATACAAA AATTAGCTGG GGGTGGTGGT GCACACCTGT ATCCCCAGCC
 117951 ACTCTGGAGG CTGAGGGAGG AGAATCGCTT GAACCAAGTA GTGGAGGTT
 118001 GCAGTGAGCT GAGATCACAC CACTGCACTC CAGGCTGGC GACAGCGAAA
 118051 CCCCATCTCA AATAAAATAA TAAATAAATA AATAAAATAA TAAAATAATG
 118101 CCCCTCTAG TTGAAAAACT AAGTTCTAC CTAAGCATAA TTGGATTTA
 118151 CCCAATTTAT CTTCTTCAA AATACCTCAA ACATTTCACT TTATTATTCT
 118201 TTAAAGGAT TACAAAGTAG AGCAGGGGGG AAATAATAA CCACTAATAA
 118251 AGAATAATAG CCATTGACA GACAGGTGTT TTAGTTCA TAAAAAAAAAAA
 118301 GATGCCCTGGT AGATTCACTC TTTTATGAAT ACTAAAGAAAT GCTCTTATT
 118351 TTGTTGGT GGAGACAGGT TCATTTGAA CCTAACCTGG TTGTTCTCAGG
 118401 GAACATAGGT TAGAGGGAG AGATTTAGGA GTGAGGGCTC AAGCAAGAAG
 118451 CATGTTAGAA GACTGCTGTA GTGGTCCCGG TGAGGAGTGA AAGGAATGGA
 118501 ACTAAAATAC CATGAGGAAC GTGGGCCAAA GGAAACAAGT CTGAGAGATT
 118551 TAGAAAGTAA ATCATCAGGA TTCAGTGGTG ACTCTTGGAT TTGAAGAGGG
 118601 AAAGGGAAATA ATCTAGGGTA GCTGTCAGTT TCTGCCATGG GTAGTTGGG
 118651 TAACAGTAGT GTATTAACCTG AAATGGGGGG CAGGCAATTG GTGAGGGTGA
 118701 GTTGAGTTCA GCACAGGGC TGTGACTTT GAGGTGCCCT TGAAACAGGA
 118751 GTGGATATGT CTAATTTAC ATGAAGTGTG TACTTAAGAG AATGTGTAGA
 118801 GACATTAACA GGGCTGGGT GGAACACCGGA ATACCTCAGG TGCCAAATGA
 118851 AAACTTTGG CAATAACAG AAGTTAGGAA GTTGAAGAGG GTAGAAGAGG
 118901 CAGCAGAAAT GTAGATGGT AAGAACATGT TGGCATGTTT AAGTGACATT
 118951 GTGAATAAAC CTGTCTACT GGGCCAGATG GGATTAGGGC TGAGATCAAA

119001 GCAGGCCTAA TGCACTTTGC AGACGTGTTT TGTAGACTT TTGAGAGCT
 119051 GGATCACACA GTGTCCTAAA TTAAATTAG GTGCCAACAT TTCCACACAA
 119101 AATCGGATT TCTGACTTTT CTTTAACAT AAAGGGCTCC TAGAGGTAGA
 119151 TTTGGCAACA TTGGTAGACC TATATGATAA TAATCGACTG AAGTATATGT
 119201 CCTTCTCTC CAATGAACCT GTTTACTTA TGTTATTTCG CTGAGCCCT
 119251 AGACATTTAA ATTTTGACT TTTTTTTT AATCCAGGCT TATAAGTCAG
 119301 ATGATTTTC TACTTCTGAG TCAAAGATCA GTAGGAATAA AAGGTACAAA
 119351 GATAGATTAG CAACAGATTA CGGAGAGCTT TGAATACCAA TCTAAGGAGT
 119401 GTAAATGTAG GCAGTGGGG ACCTTTGAAT AAGGAATTGA TGAGATTTAA
 119451 GGCATATTTA GGAGGATTAT TCTGGACAG TATGAAAACA CAGAAGTTAG
 119501 GGAAAACAGT TAATAGTTT GAAAGAGAAG AGAAAAAGGA GATGGTGTG
 119551 GGATACATAA ATGGGCTTTT AAAATGAAA ATGAGAAGTG TTTAAAGAG
 119601 ATATCACCCA GAAAGTCTAT GCACTGCCAC ATGGGCACTA TATGGGTGG
 119651 TGTATTTGGT GGGAAATTG CTTGCAGACT TCCAGAACTC AGACCAATGT
 119701 GTGGTGTGGG GGACGGTGT TGTCAAGGCT TATGGAAAGG TCAAACAAAA
 119751 TATGCTCACT GGCTATCTAT GCCCCACAGG TCACTGTAGT CTCTGTATA
 119801 AGTACACTAA GTGGAGGAG AAGGTCTTTT AAAAAAAGA AAGCTAAAAT
 119851 TAATACCTGA TTGTTATTTA CTGTCGCA AACACTGTTC TAAGCTCTT
 119901 ACACAGACAT TTATTTAAT OCTCGCAACC AATTCTGAA GTAGGTACTT
 119951 TTCCAATTTC CATTTCACAG ACAAAAGAAC TGAAACCCCTA GAGGTAAAGA
 120001 AGTTATCCAA AGCCACAAAGG CTGATAAGAA CAGAACCAGG ACTTGAACGC
 120051 AAGCAGTCG CCTCTCCAGA GGTTTATCTT TTAACTGCTA TGTTAAACTG
 120101 CCCCTGCATT TTAAATCTGTT CTAATGCTAC ACAGATAGGC AACTTTACAG
 120151 GTAGAGGACC TTATGCTTTA TTCTGGATGC TCTGTTATAA CTGGTTTCAG
 120201 GGGTGTCAAT TTGGTCCAGG TCCCTCTGGA AGAAATAAAA CTCCAGAATT
 120251 GACCCCTTGA CTGTCCTCTT GGGAGCAGAT AATGTAACGG GTCCCTGGGT
 120301 GACCTTGAGA GAACAGGTAT GTTCAAATGT CTGTCCTCTT CCTTCTAGCTA
 120351 ATGATCAGT GTAGCTTATA ATTGCATGCT TCTAACCCCTT TGTTAAAAAA
 120401 TAAAAACTCT TATAAACATG TTTCCTTTT TTTCGGAGA CGGAGTCTTG
 120451 CTCTGTGCGC CAGGCTGGAG TGCACTTGTG CAATCAGCTC ACTGCAACCT
 120501 CTGGCTCCCG GGTTCAAGCT ATTCTCTGC CTCAAGCTCC CGAGTAGCTG
 120551 GGATTACAGG CATGGTCAC CACGCTGGC TAATTTTAT ATTTTAGTA
 120601 GAGATGAGGT TTCACACCGT TGGCCAGGCT GGTCCTGAAAC TCCGGCCTC
 120651 AGGTGATCCA CCCACCTCGA CCTCCAAAAA TGCTGGGATT ACAGGGTGA
 120701 GCCACCATGC COGGCCTTAA AAATGCTTTT AAAATGAAA ACTAAACAT
 120751 GTTAATTTTT TTCAAATGTT TTCAATGAAA TTATCACAGG ACAAGTTCA
 120801 TAAATATTGA AATTTGGAAA AAGTTGCAAG CCTATAACAT TGCAAGAGAAG
 120851 CAAATGCATT TGATGCAAAG CCTCAAATTG GTCAAGTTT TCTACCATAT
 120901 TCAGTGTGGT TTCTTTCTT TTGGCCTATA GATGAAACAT GTAAATGAAA
 120951 GATTCAAGA TGAAAAAAAT AAAGAGGTG TCTCTCATGTG CATTGGCGTC
 121001 ACTTCAGGAG TTGGACGACT GCTCTTGGC CGGATTGCGAG ATTATGTGOC
 121051 TGGTGTGAAG AAGGTTTATC TACAGGTACT TTTTACACC TTTTTCCCC
 121101 TATCAAAAT TACTCTCATC ACCCAATGTC TCATTAATG TACTTACATG
 121151 CTAAATTCT TTTCCTTTTCTT TTTCGGAGAT GGAGTTTCGC
 121201 TCTTATTGCC CAGGCTGGAG TGCAATGGCA CGATCTCAGC TCTCCGCAAC
 121251 CTCAACCTCC CGGGTTCAAG GGATTCTCTT GCGTTAGGCT CCAGGTAGC
 121301 TGGATTACA GGCGTGTGCC ACCACACCGAG GCTAAATTTT GTATTTTTT
 121351 AGTAGAGATG GGGTTTCTC ATGTTGGTCA GGCTGGCTTT GAACCTCTGA
 121401 CCTCAGGTGA TCTGCCCCGCC TGGGCTCCC AAAGTGGCTT AAATCTCTT
 121451 ATAAAATGA GAAATATTTT CTACAACATA ACTTCTATAG GCAGTTTTC
 121501 AAGGACAAAA TTAGTTATTA GTTGGGTTT TAAACATGAG AAATGGCAA
 121551 TGAAACAACA ATTTCTTGT TTGTCGTGG AACTCCACCA AACCAGAATG
 121601 GTTTCATCC ATTCGTTTTT CTATGAAGAA TGTTTTTGG TGAGTTCTC
 121651 ATAGTCATGT GCAGATCTG TGCCCTTGC ATGTCCTATG AAATTTGGTT
 121701 GTGTGTGTGA TTTCAGCT TCTTACTGCA AAATTGCGCTC CTGGTTTTT
 121751 GGGGTGAGCA TAAACAAATG CTAACTCAA GATCATTGCT GACAATCAAC
 121801 AGAACAGGTG TTGAAGTGAAC TCCCTCATGC CACACACTCT GCTAAATGCT
 121851 GAAGACTTAA GTGAAACATG GTCTGTGCC TCACTTAGTA GCTATGGTC
 121901 TCATGGAGA AGATAAAAGCA GTGTTGCCAGC ACAGTGGAAAT AACGGTTTG
 121951 CTAGATGAGT GGCATAGCAA CACAGGCCAC ATGCATCTGA GTCACTAGTG
 122001 AAGGGCTGAG CAGAGTTAAG AGGTGAGGAC CAAGTGTGTA GATAAGGGAG
 122051 ACAGAGAACG ATGCTCCAGC CAGAGACAAA CACATGGGAA ACACCTCCCA
 122101 CACTGTGGAG GTGTGACATG GGATGTTATA TCTGGGAAAC AAATGTTGA
 122151 ATGAAATAAA GGGAGAATAG TGGAATGGATT GGTGGGGGGG ATGGACAGGA
 122201 AGCAGCTTGG GAAGGGCGGT TATGTACATG AGCTCTATCC TGCAATCTAC
 122251 TAGGAGCTAT TAAAGGATT TAAGCCAGAG AGTGACATAA ATTTGGGTGG
 122301 CGGGGGTTGG TGTTTTTGG TTTTTGAGG CAAGGTGTCA CTGGTTTC
 122351 CAGGCTGGAG TACAGTGGTG CCATCACAGC TCACTGCGAC CTCAACATCC

FIGURE 3-36

10/506513

122401 CGGGCTCAAG CAATCCTCCC ACCTCAAACCT CCTGAGTAGA TGGGACTACA
 122451 GGTGGTGCCT ACCATGCCG GCTAATTTT GTTTTTTGT TTTTTTCTG
 122501 TAGAACAGG GTTCGCTGT GTGGCCAGG CTGGCTCGA ACTCCTGGAC
 122551 TCCAACGATC CACCCATTTC AGCCTCCAA AGTGCTGGGT TTACAGGTGT
 122601 GAGCCATGCC CAGCCTGAGT TGTGTTTAT AAAGATCAAT TTGGCTGTG
 122651 CGTGGTGGCT CATGCCCTGTA ATCCCCGAC TTTGGGAGGC TGAGGCAGGT
 122701 AGATCACCTG AGGCCAAGAG TTTGAGATTA GACATGGGTGA AACCCCGTCT
 122751 CTACTAAAAAA TACAAAATT ATCCAGGCAT GGTGGCACAT TCTGTAAATC
 122801 CCAGCTACTC AGCAGGCTGA AGCAGGGAAA TCACTTGAAC CTGAGAGGCA
 122851 GAGGTTACAG TGAGCTGAGA TTGTGCCACT GCACTCCAGC CTGGGTGACA
 122901 GAGCAAGACT CCATCTCAGA GAAAAAAA AAATCAATCT GGTAACTGTG
 122951 AAGAGTGGAA TGGAGTGGAG GAGGGACAA GAGTTGAGAT AGTCACAAAAA
 123001 GGCCACATAC TGAATGATTC CATTATATG AAGTGTCCAG AATAGGAATC
 123051 TCTGTCTCTT TCCATAGAGA AAGAAGGTAG ATTGTGGTT GTAGGGCTA
 123101 GGGAAAGGAG GGAATGGGA GTAACTGCTA CTGTGTTTCT TTGTGGGTA
 123151 ATGAAAATGT TATAAAAATT GATAGTGTG AAACCTACTG AATTGTGCAAC
 123201 TTTAAGTGGG TGAATTTCAT AGAATATGAA TTATATCTCA ATAAAGCTAT
 123251 TTTTAAAAGG GCCAGGCATG GCAGCTCATG CCCATAATAT CAAACCTTTA
 123301 GGAGGCTGAA GCAGGAGGAT CACTTGAGGC CAGTTGAGA CAATCCTGGA
 123351 ACCATAGTGA GACCTCATCT CTACAAAAAA AAAAAAATT TTTTAAGTTA
 123401 GCCAGGGACG GTGGCACATG CCTATAGTCT TAGCTATGCA GGAGGCTGAG
 123451 GTGGGAGGAC TTTGAGCTTA GGACTTTGAG ATTACAGGGG AGTATGGTCA
 123501 TGCCACTGTA CTCCAGCTTA GGTGACAGAG TGACACCATG TCTCTAAAT
 123551 TTAGAGAAAA AGAGTAGAGG TCCAGGGACT AGTTGGAAAC TATATTAAG
 123601 TAGTCTAGGC ATCTAGGCAG GAAGAACCAA GGCAAGAGATA CTGAGATCAA
 123651 ATGGAATAAG CTAGGGACAT AGAGAATGAG AATTGTGAA AGCCACTTAG
 123701 GCTGGATCTG AGATTTGTG CTCAGGTAAT GGAGTAGATG ATTTTGCAT
 123751 CTTATCAAGA TCAATATGCA GTAGATCTAA GTATGTGAT GAATGGGTT
 123801 TTTTTAAATT AAAAAAAAT TTTCAACCAA CCTACCTGCC CTTGCCCCAG
 123851 TGATGAGTTT GTTTTGCA TGTGTTTGT GATGCTGTGA GGAAAGCCAA
 123901 GTAGTGTTTA GAGCTCATGG AAGAGCTCTGG ATAAGAGGCC TGTGGGTTAA
 123951 GAGGCTGTG GGTTAGGAAG CCTGTTGGTT TGGCATTCTAT GGGCTGCATG
 124001 AAGTAAGTGG AGGACTAAGG AGATGAAAG GGAGTGGCCA GATAGGCAAG
 124051 GGGAAAACAG GGATGAGAGT GTTTCTAGGG GCAGGAGTGG TCAGCAGTGT
 124101 CAGTAGCTAG TGACAAAGAG GCTGAAAGGT TTTCTATTGAA TTTAGAATAG
 124151 GGAGGCTATG AGTGAGCTTA CAGAGAATGG TTTCTACAGG TGCAGAAAAT
 124201 TGATCATGAT CATTGAAACA AATGAAATA TAGACAATT TGCCAAATG
 124251 CTTGGCTGTG GAAGGAAGGT AAAGGCAAGC CACAAGGGGG GGTCTTAGGT
 124301 TTTGAGGATT AAGCTGCT AATTATATTA TACATGAGAG GCAGTATTTG
 124351 AGCAGGGCCT TGAAAAGAG GTGAAATTG GACACAGGAA AATGATTGGA
 124401 AAAGGCTTAA CAGATAAAAGT TAACTTCCAT TAATTGACTT GAAGTAATAA
 124451 CAGTCACCA TTATTGAGG ACTTTCTATGT GCAGACAAAT GAACTAAGGG
 124501 CTCTACATGC ATTATCTCAT TGATCTTGC CCCAGCCCTT TAAGAGAGAA
 124551 GGTACCATTTG TTATTTCCAC TTAGAGATGT GAAACACTGAG GAACTGAGAG
 124601 GCTACCTCAC TGTTGGTGTG TGTGTTGTATA GAGGTGCGAG CAGTCACAGG
 124651 ACAGTCTGGT CACACAGCTA GAAGGAAGTG AAGAGAGTTG GTAATGTGCT
 124701 GCTTTAAAAA ATGTATTTAT TGTATCATGA TCACTTTGTC AGTACTTCAC
 124751 TGTGGACATC CTCTACAACT ACCTAGTTT GTTCTCTAGT GTCAAGGGAG
 124801 CCCTCTAAATG GACATTTATT GCACTACAGA CTTTCAGCTT TCATACATTC
 124851 AAAAATTGAG TGCCCTCTGT GCCCCAAGCA CCAGCTCAGA TGCTGTTAGG
 124901 GTGATGCAAAG CAAGACAGAC ATGGTCCCTG AGTTCTAA GCAAGCCTGA
 124951 GCGAGGAAGA AGCCGAATGT GTGTGAAAC CCAAGAAGAT GGGGAAAGTG
 125001 GCATGGGAAG GGACTGGAAA GTTAGAGTGG GTCAAGTTAG ACAGAGCCCTT
 125051 GAAAGCCAGG ATGAAAGAGAC TTGCTTTAA GAGTAGTGGA TTTTGGCCGG
 125101 GCGCAGTGGT TCAAGCTGT AACCCAGCA CTTTGAGAGG CCAAGGCTGG
 125151 CGGATCAOGA GGTCAAGGAGA TCGAAACACA GTGAAACCCCC ATCTCTACTA
 125201 TAATTACAA AAATTAGCCA GGCTTGGTGG CACCGCTCTG TAGTCCCAGC
 125251 TACTGGGAG GCTGAGGAG GAGAGTGTGCT TGAATCTGGG AGGCAGAGGT
 125301 TGCACTGAGC CGAGATGCA CTACTGCCTT CCAGCCTGGG TGACAGAGTG
 125351 AGACTCGTC TCAAAAAAAA AAAAAGGT AGTGGACCTT TGTGGGAGGA
 125401 CGTAGCTG ATTTGTGTT TAAAGTCACT GTGGTTGTT TGTGTTTGTG
 125451 GGATGGATTA CAGGGAGGGA AACAAAGAGTG CAAGAGGGGA GGAAGACCTG
 125501 TTAGGAGATC AATTCTAGGT CCAGGTGAGA GATGATGGAC TATGGTGTG
 125551 TAATAGATAA AGTCATGATA TATTTTATAT ATCAGCATT TATTCCAAA
 125601 CAATGTTGA ACCTCCTCCT ACCCTAGATA GGGCAGACAG ATTATCTGCA
 125651 ACATTTTGG AGCACATTTT AATACCTGAC TGTGTTCCAGT AATTTACAAA
 125701 AGAAAATATA GCCTTCTA ACTTGTGACCA TGTGGTGTG CAGTTACACA
 125751 GCAGTAAGTT AAAAGTTAGT ATTGGGGTC AAATTTCA CTTTGTGATGA

FIGURE 3-37

125801 AAGTTTAGCC ACAATCTGGC TTCTGTAGG CCTTATCTAA TTTTGATC
 125851 CAAATGAGA GCATCGTTTG TGGCACCCAG TAGCACATGC TGAGTCACAG
 125901 GTGTGACAGC TGCATTTCAA ACAAGCCTGA GAAGGAGAAA GAAAGCCCTT
 125951 CAGTGTGTCC TGTGGTTGG AGGAGCCACT CACGGACTCC ACCTTGTGAA
 126001 CACAGCGGCA CAGGACGCAA CACAGGCTA ACCCATGCAG GATGCTGGAC
 126051 TCGTCCCTT ATTCACTACC TCCTCTCTCT CCTTTTCTAT GGCTTCCCTTG
 126101 CCCAACATC CCAAACACAC AGTGTGGTTT TTGATTCTTG GCTCTTCTCT
 126151 GCTGAGCTTG ACTCAGCTC TGCCCTGTTG TTCCCTCCCTT TTCTCCATC
 126201 CCTGGCTCTC TGCTTTGG CCCATCCCTT AAGGCTTGGG ATGCTCTG
 126251 GCTTACCTTC TTTCATTCA TTGGTGGTGT GTTTTCTAG ACATACCTGC
 126301 TCCCTGCTT CATCTTCAA TTCTTGGGG CTGTACAAC TCTTCCCTCT
 126351 TTGTCCCCCTG GAAGCCAGTT CTGAGTAGCA GCCAGGCCA GAACACTGGT
 126401 GACACAGACA CACTTCATAG CCCTCCCGCA TGGTCTAGTT TCAGATCATG
 126451 GTAATCCCTA GTCTAGGAGG CTGCGAGGCC CAAGAGCACA GGCTCTGGAG
 126501 TGAGAAGCCA GTTCAGGGCA GTTCTACAC CAACTTGAGA ATCAGCAGAG
 126551 GGCTGTGGTG AGGATTCTTG GTGGCAGGTT ATGTAAGTG CCTAGCCCCAG
 126601 ACTGGATGAT TAATAAATCC TTGCACTCTG TATCTTTAA TATCTTATTA
 126651 AATACTGAAA GCAGATCTG ATTTGGAATA GGTCAGAAGA AAGGAGACTA
 126701 GGGCTTAATC CTGAATTAGA GTCTTGTCTT ATAGTAACA AAGAATTATAT
 126751 GAATTATCT CACATTTTG CTAAAGAGTT CTGAATTAA ACTTCCATCA
 126801 AGGTCTGGG TCCCAAGGTGT TTTCACCTA ATAATTCTAA ATATTGAGTG
 126851 GTGGTTGCA GTAGCTTATG CCTATAATCC CAGCGCTTGT GGAGGCCAAG
 126901 GCAGAAGGAT CCCTTGACCC CAGGAATGCA AGACCAAGCT GGGCAACATA
 126951 GTGAGACCTC ATCTCTACAA AAAATTAAAA AGTAGCTGG ACATGGTGGC
 127001 CTACACCTGT AGTCCCAGCT ACTTGGGAGA TTGAGATGGG AGATTGCTT
 127051 GAGCTGGGGG GTTGGAGGT GCAGTGAGCT GTGATCATGC CACTGCATAC
 127101 CAGTCTGGT GGCAGAGTAA GACTTTGTCT CAAAAAAATA AAAAAAATAAA
 127151 AAAAAATGCT GAGTCAGTC TACTGCTCT GCCAGAAGAG ATGACTGAAG
 127201 TGCATTACGT AGAATAATAA TGGTTAAAGA AAAGCTTGC AAAAGTTGCC
 127251 AGAATATATA CTTTATTGGG ACAGGAGAAG CTACGTGTGT CGTGGTATCT
 127301 TTTTACTATT TTCTTAATCT TATAGGCTG TGTTCCTAGT CACCAATTAA
 127351 TTACTACAGA TTGTGTGTTT TAATGTAATA TATAAGTGTG TTGGAAGGGT
 127401 GAGAATATTG CAAAGTTTG AAAGTTAAA CTGTGTATGA AAGAATTGAA
 127451 AACTTGGAA TTAGATCACT TTTCATTGT GTCATATTC TCTGTGACAT
 127501 GGACATATTG AAGCATGGAC ATCATGTCCA TGCACATAAA GCAGACAAAC
 127551 CAGACAACAC ACACATGTGC ACAGGAACGC TCTGGAGGA TGAAACCGA
 127601 ACTGTTAAGT GTTGGATCT GAGGAGGTGA ATGGCATGG GTTGGAGGTG
 127651 AGAAGAGGTT GTAGGAAGAC TTTCATATAT TACTGTGAC ATTTCCTCTAA
 127701 GGTGAATT TTTAAAAATA TATTCACTGAG TTACTTTGT ATATGAGAAA
 127751 TATTAATGAC TTTCCTATCC ATCACTGTC CTAAGCTTCC TCTTCCGGTT
 127801 CAGGTAGAAT GAATTGGATC AGTGTGTC CATTTCAT TTTAGCATT
 127851 TACATTGCC TAAAGATATC TTGGGATGAG GTTATATACT TTATCAAATG
 127901 TAAGCTATT CAAAGTAGT AAATCCAAAT ACTTAAACAC TTCCAGGCT
 127951 AAGTAAATGA TCAGAGGCTC CGTACTCTG CTCACTAGA CTGTGGCACT
 128001 GGGTGTGAC GTATCAAATG CATGTTCTC CATCAGGAG AAGTGGAGGT
 128051 AACCATGTGC CATGGAGAG GTTGACAGAC TCCCTGTGAA GCACTTCGAA
 128101 GTGACACTGG CCTCTGTGTT CTTCAGAAGA ATCCAGGAC CTGCTGTG
 128151 GCGTACATT TTCCCTTGTG TTGTGATGGG CCAGCAGAAC TCTGTGCGA
 128201 ACTGTTTCT GTCCGGGTG CCTAGCCAGA GTTCTGAAA GTCTGGAGAC
 128251 TTATATTG GAAACGTCAA TTACATGTCT ATCTCCAAGA
 128301 TGCCTCTTT TATTCAAGGTG CAGCTCATTG TTCTCTCTG AGCTACACTT
 128351 AAGATTCTTG AGCAAAACCT AACTGACAT TTCTCCAGCA ATGCTCTCT
 128401 TGAGATAGAA ATGGGAAAAG TAAGGAGAAA AGGAATCTTT TGTTCTCATG
 128451 TGCATACACT AACTCATAGA AGGTTAACAC TTCTATGCC TGACTATTAA
 128501 TAACAAGTAT TTATATTTA TGATATATTT CCTTTAAAGAA AACAAAGGA
 128551 ATATAGACAT CAAACACTGTC ACTGGCTTAT TAAGTGTGAG TGCCAGAGGC
 128601 TAGGAGAAAA TAAGGAGCCT GTGAATTCTT TACTCGAATC TAACCCAGAGC
 128651 TGCTGTGTTT GAGAGCAAGT TTAAAGAGAT TGATGTAAAT ACTAAGTTA
 128701 TTCACTCTTC ACACGTGTC CCAGCATCAC CAGATCAGTA TTTGATGCC
 128751 GGATCAATCT TTATTCGGG GAGTGTGAA GCATTGAACC TGCTATATGT
 128801 ATAGTTGCC GAGGGTGGC ATGTGCTCT TGTGGCCAG GCATCCCTGC
 128851 ATATAAGGAA TAGGTACGTT CTCAGGAGCC TCACCTACTT ACCTCCACAT
 128901 TTAGCCAGAT TCTGGTATT AACATCTGCT GGGAAAGAGC ATCACTACAG
 128951 TAGTACAAA TAAGGAGGAA GAAGCAGAAGT ATTTTCTGA GAAGTACTTA
 129001 AAGAATAGAT GTGTAATT TTCTAAACAC AAGTCTTAA GGAAATGAA
 129051 AAAATTCTAC ATTAAATAA CTACATAAAAT CATTGCTAA TTTAATAAG
 129101 AATATAACTT AATATAGCTT GAATGGAGAA AAGGACAAC TGAGTCAGG
 129151 GAAAGTATTA AGAATAATA TGCTCAGTCT GGGCGCGGTG GCTCATGCC

FIGURE 3-38

10/506513

129201 GTAATCCAG CACTTTGGGA GGCGGAGGCA GGCAGATCAC GAGGTCAAGA
 129251 GATCAAGACC ATCCTGGCTA ACACAGTGAAC GCCCCATCTC TACTAAAAAT
 129301 ACAAAAAAGT AGCCAGGGT GTAGTGGC GCCTATAGTC CCAGCTACTC
 129351 GGGAGGCTGA GGCAGGAAAAA TGTTGTGAAC CTGGGAGGCA GATCTTGAG
 129401 TGAGTCGAGA TCGGCCACT GCACTCCAGC CTGGGTGACA GAGCAAGACT
 129451 CCATCTCAA AAAATAAAA AAATAAAA AAGAAATATT ATGCTAAAAA
 129501 TATATAGCA TAAGTGGAA ACTTTACTT GAATAATT TT TACAAAATCTG
 129551 ACCAAAGAAC AAAAACGTGA AGAGGCAAG TTCCAAGACT CATGTTATGT
 129601 AAATTGTTCT AAAACACAT TAGCACTAA CAAAGTTGA AAGTTAACAA
 129651 AGCCAAGTAC TGTAAGTAGG TTCCAACACT AACTAAGTAT AAAATTCCAC
 129701 AGAGCTGGTT TTCTTATCTT TAAAGAAATT TGTTGGCAAG TGGTACTGGT
 129751 GTTAAAAAAA AAAAAAAAAGGAAATATG TACTGACCA AATAGAAAAA
 129801 AAATATGAAG CACATTTAAA GAAAAAAAATA TATATTCTG AAAACCTGT
 129851 ATAATTACAG TGGCATGGTT GGGATGTT GGCTCTATAGT TTTAACAAATT
 129901 AAATCCATTG AATCTGGCCC CGTACCATCC TAAAGTTTA TTCTAGATT
 129951 TCTGGAGTTT GTGATTATCTA ATATGTTCT AAGATTTAAG TAACTTTCA
 130001 TGTTTATCTC CTTTATGTT TGATACATAGA ATAAAATGT TTCTATTGTT
 130051 AAGAATATTAA GAGTTGGACG CAGTGGCTCA CGCTTATAAT CCCAGCACTT
 130101 TGGGAGGCA AAGCAAGTAG TTTGTTTGGAG CCGGGGAGTT CAAGAATGGC
 130151 CTGGGCAACA TAGTAAGACCC CCACTCTAC AAAAAATAAA AAATTAGCCG
 130201 GGCATAGTGG CATGTCAG CTAACGGGGAA GACTAAAGTG GGAGGATCAC
 130251 TTTGAGGCCA GGAGGTTGAG GCTGCACTGA GCTATGATCG CACCACTGCA
 130301 TTCCAGCTG GGCAACAAAG TGAGACCTGT TTCAAAAATA AAAATTGGG
 130351 GTTATCTAC TTAGATTTT AAAAAAATT ACTACTTTAA TCTTTACCTG
 130401 CTTGTTAATT TCAAAACCTT TTCTACATT TGATTTATCT TAAATCTCT
 130451 TTTTGTCTCA ATAAATGGGA AGTATCAGGA AGTCTTTTTA CTGGCTCAAG
 130501 GTCAATAGAGA GCTTAAACCC TGGTAGTGTG CCTCTGAGCC CGAGTTCTT
 130551 CCAACCTGCC AGGCTGTAGG CCCAACAAATT ACTCACCCT AAGAAATTAT
 130601 GCTTGTGCTG TCATGGCACTG TGCACTGGAG AAAAGGATAT TTAACGGCA
 130651 AACAAAAGTC AGGAGAAATGG GGAGATTTTG TTCTTTGAA ATGCTAGTGT
 130701 GAAGTGCTAG GCTTATTTT CAAATGCCA ACTCGTATTTC TTTCTTTTC
 130751 TTTTTTTTTT GAGAGGGAGT CTCACACTGT CGGCCAGGCT GGAGTGCAGT
 130801 GGGGGATCT CGGGCTACTG CAAGCTGCCG CTGGTGGGTT GACGCCATT
 130851 TCCCTGCCCA GCCTCCGAGT AACTGGGACT ACAGGGGCC ACCACCAAGC
 130901 CCGGCTAACT TTTTTTTTTT TTTTTGTATT TTTAGTAGAG ACGGGGTTTC
 130951 ACCGTGTTAG CGAGGATGAT CTTGATCTCC TGACCTCGT ATCCGCCCCTC
 131001 CTCAGCTCC CAAACTGCTG GGATTACAGG CGTGAGGCC CGCGCCCCAGC
 131051 CGGGCAACTC GTATTCCTAA ACGAACATATA ATTTCACCAT AAGACCATAG
 131101 TTTAGTGATT GAAGAAAAAA TGTAACGAAAC TGATGATAT GATGGTGTCA
 131151 AAAAGAACTA ACCCAATATG AAACAGTTT CAGGAGCATG TTTCCTATT
 131201 TGGTGTCACTG GGACCACTTG TGTTAAAGTT GTGAAAACCA ACACCTCTGA
 131251 ATTOCCACCA GAACCTCACAC TCTGCACCTT CAGAGGCCCT CAGATTGTGA
 131301 GTGGCTGCCG CGAGGTGTAC TACCAACCTC CAGCTTCCGT AGGTGGTAG
 131351 GTGTGCTAGT AGGGCTTAGG AAAAAACAGAA CAGATGAGGA CAGTGATGCA
 131401 TACAGCTGCT TTATCTGGTC TCTCCCTCTT CCCTAGCTG ACTGCTATTG
 131451 GAGGGCACCC TCCAGGCA CTTCCATCTTC TGTCCTTTGG GCACATTAAAC
 131501 GGGGCATGGT TCCAGGACGG CTCCATCTTC TGTCCTTTGG GCACATTAAAC
 131551 CTCTCCCAGC GTCACTATCT TCATCAGCAA AATGGAGATA ACATTAGTAC
 131601 CACCTCATAA AGTTGTTATG AGGATCACCA GTGAGATAAT CAATCTAAAG
 131651 TGCTTACAAC AATGCTTGGC ACTTGGAAA CACTAAATAA ATGATAGTTG
 131701 CTATTATATG CATACTTTA AAAAACCTGA TGCTTTTTAA AATTTTTCT
 131751 GCTGACTAGT GAATTGTTCA GTTTTTGGG TTGTTGTTGT TTGTTGTTGTT
 131801 GTTTGAGACG GAGTCCTGGT CTGTCGGCCA GGCTGGAGTG CAGTGGCATG
 131851 ATCTGGCTC ACTGCAAGCT CCACCCCCCG GATTCAACGCC ATTCTCTG
 131901 CTTAGCTCC CGAGTAGCTG GGATTACAGG CGCCGGCCAC CACGCCCCGGC
 131951 TAATTTTTT GTATTTTTAG TAAAGACGGG GTTTCACCTT GTAGGCCAGG
 132001 ATGGCTCTGA TCTCCCGACCC TCATGATCTG CCCACCTCGG CCTCCCAAAG
 132051 TGCTGGGTT ACAGGCATGA GCCACGGTGC CGGGCCATGA ATGGTTCACT
 132101 TTTAACAGGT TCTGTGCTT AAAAAAGTTA TTAAATTGAC TGTTTCTCC
 132151 TTTTTGTAC CCATCATACT TTGAATATAT AACTACGGCA GCATATAAAC
 132201 ACTTCACTTG CACTTATTTA TTAAATGTC CACTTTCCA TAACCCAAAG
 132251 GTAGGAACGA AATCTTATTTC ATTGTGAAA CCTCTAGCAC ATAGCACAGT
 132301 GCCTACCAAA TAGTAGGCAA AATCAGGTGT TCAATTCTAT TAACTACTCT
 132351 AACACTGAAC TGAAAGTGTGTT CAATGGCTCA AAATAATATA ATAAGGCTTA
 132401 ACTCTGGGT GCTTAAATTAT ATCTATAATC TCTGCCAGTG AAGTATACAT
 132451 AGTTTAAAG GTTAAAAAAA AATCAAGTGT TTAAATGAATT TGAGCTGATT
 132501 GAGCACTGAC CAGATACAGG ATCCTTAAAC TTCTATAATAT CTAGTCCAAA
 132551 GATGAATTTT TTTTTGGTA CAGATTCTGA CTTCAGGGAA TTGGCAGGCT

FIGURE 3-39

10/506513

132601 GGGGAGGGAAA TAAATATAT AAAAAGTCAT TTTGGGOCAG GCGCTGTGGC
 132651 TCATGCCCTGT AATCCCAGCA CTTTGGGAGG CGGGCAGGT GGATCACTTG
 132701 AGGTCAAGAG TTCAGACCCA GCCTGCCAA CATGGGGAAAG CCCCATCTCT
 132751 ACTAAAAATA CAAAATTAG CTGGACTTTG TGTTGCTTGC CTGTAGTCCC
 132801 AGCTACTCGAG GAGGCTTAGG CAGAAGAATT GCTTGAACCT GGGAAAGCGGA
 132851 GGTTGTAATG AGCTGAGATC ACACCACTGC ACTCCAGCCT GGGCAACAGA
 132901 GACAGACTCC AGCTAAAAAA CAATACGTTT TTTAAATCTT GTCCCCTTAAT
 132951 GGAAATATTG AGAAAATGTC TAGGGGAACG CGAAAGGAGAT GATTATAGGA
 133001 GTTGATTATG TATGAAAAT CAAAGTGAAT GAGGCACTGG CAGGGGGGAA
 133051 AGGGGAAAC AGTAATGACT TAGAAGTCTT AAGCATGTTG CATGGTAATT
 133101 GTGACATTG CTTCCTGCGA GCGGAGCTGA CCTTGTGGTG TCCGTCCTAG
 133151 GTACTCTCTT TTTCTTCAT TGGCTGTATG TCCATGATGA TTCTCTGTG
 133201 TAGCATCTT GGGGCCCTCA TTGCTGTGTG CCTCATCATG GGTCTCTTGC
 133251 ATGGATGCTT CATTCTCATT ATGGCTCCCA TAGCTTGTG GTTAGTTGGT
 133301 GCGCAGGATG TCTCCCAAGC AATTGGATT CTGCTGGAT TCATGTCTAT
 133351 ACCCATGACT GTTGGCCAC CCATTGCAAGG TAAATATAAT GATTCTCAG
 133401 TAGTTATATT AATTCTATG ATTTCTACT TCAGGTCTTA ATTAAGTCTC
 133451 ATTTATATGT AAAACATATT ACAGGTTATT GATTACTGGT CTTTGTCTT
 133501 TATGTGTGCC TTACTGGTAA CATTTTAAT AAGACTAGCT ATTAAACAGT
 133551 ATGTTGAATT TGCTGAAGAG TCCCTCTTAT CTTACTGGC AGCTAAAACA
 133601 CTATATAAAA CACTTTGGG GCGTCAAGGCG GGAAGATCAC CTGAGCTCAG
 133651 GAGCTTGAGA CCAGCCTGGA CAACATAGTG AGAACACTATC TCTACAAAAA
 133701 ATAAAAAAATA AAAAATTAG CCAGGCGTGG TGGCATGICAT CTGCACTCCC
 133751 AGATGCACAG GAGGCTGAGG TGGGGGATT GCTTGAGCCC AGAGGTCAAG
 133801 GCTGCACTGA GCTGTATCA TACCACTGTA CCGCAAGCTA GGGAAAACCC
 133851 TATCTTTAAA AAAAAAAAAT GTTGAAGATT CTGAAAGATT TCTAAATATG
 133901 TCGGCTTTTG GTAAGAGATC ATACATCCCC CTGAGGAGTA GTTGATGAAA
 133951 AATAACATGA TAGAAAAAAC CCAAATGCT GTAAATAGCT AACTGGTAA
 134001 GCAAAATGTG GAATATCTAC AGTGAATAT TATTCAAGCA TAAAAAGGAG
 134051 TAAGGTACAG AACTGATGCT ACCAGGTGAA TGGACCTAA GAACATTATG
 134101 CTAAGTGAAGA GAAGCCAAAC ATAAAAGGTG ACAGTGGCTGG GCATGGTGGC
 134151 TCACACCTGT AATCCAGCA CTTTGAGAGG CCAAGGCAAG AGAACATCTT
 134201 GAGCTCAGGA GTTCCAGACT AGCTTGGGTA ACATAGCAAG ACCTTGTCTC
 134251 TACTAAAAAT AAAAAAAAT AGCCTGGCAT GGTGACACAT ACTAATATTA
 134301 GTGTAGTCCC ACCTACTCCA GAGGGGGAGG CGAGAGGATC TATTGGCCT
 134351 GGGAGATCAA GGCTGCAAGAG CGGTGATAGC ACCACTGAC TCCAGCCTGG
 134401 GTGACAGAGT GAGCCCTGT CTAAAATAA AAGGTATAT ATCGTATGAT
 134451 TTATTTCTATG TGAAATATCC AAAATAGGTAA ATTCTATACA GATAGAAAAC
 134501 TGGTGAATG CAGGGGCTGG AGAGAAAAGGG ATTGGGAAGT AACTACTTAA
 134551 TTGGAATGAA GTGCTTTT GGCATGATGA AAATATTTG GAACTAAATA
 134601 GAAGCAGTGG GTGCAAACAA TTGTGTATGT GCTAAATGCC ACTGAATTGT
 134651 TCACTTCAA ATGGTTAATT CTATTCATG TGAATTCCAC CTCTAGAAAT
 134701 TCTCTGAATG ATATTATAAA GATGTCCTAT GTTCAGTATT ACTTGGGTGC
 134751 CTGTGTCAAT TAGTATTAGA AGATTCAAGTA TAAATATGAT AAAATTAAA
 134801 TGTGTGTACT GTCATCTGT TTTGGCACAT GAGGTGCTCA GTGAAGGTTT
 134851 AGCTCAATTG ATTCTCTACAC CCTGAACCTGT ATTCCCTAGTC ATGAATCAAG
 134901 CAAGCAGAGT TACTACTGAG CAGACCAAAAT CCAGTTAACG TTCAAAAGGT
 134951 CATGGTCCTCC TTATAGGAGA ACCCTCATT CCTCTCTCTC TCCCGCAAGT
 135001 ATATATAGT TCACTCTCTT TTCTATAGCC TACAAGCTTA GTTTTATAGT
 135051 TTCTAAGTCC ACAGCAGATT TTATATAAGC AGCACTCTAG TAGTAAATAG
 135101 TTTTGCTACC AGAAGTGACA GTTAACAGAG CAAGAATAAG GGAGGTAACA
 135151 GGGAAACTCTT AAAGCAGGCA GAACACCAAC ACACAGCAAC TGGCAGCAGA
 135201 AAAGCTGCTGG CTCACCAAGGA GGCTCTGAGG GCATCATAGT ATTACAGCAG
 135251 AACATAATCA TGAGTGTCA TAAGGAGGAA GAGTTCAAGGA ATGGTCTGAT
 135301 TCCAAAGATA GAAAACCTGT GCATTACAG ATATTGTCTA TTTTATATAT
 135351 GCAGAAATGGA TGTACACATT TTTATGTGTT GGTACTTAAT TGGACAAATG
 135401 GTCAGCTATT TATTTAACAA TGTCAAGATAG ATATTAGTA CAGTATATTC
 135451 CCTGGACATT TTAGATAACT TAGGTTTTAT AGTATAAGTT ATAAGAGTTT
 135501 AAAAACACTA AGATAACTTT TAAAACCATG AGTCCCTGGAA TTTGTTAGAG
 135551 AAATTAGAAA TGTGAGTAC CGTAAAGTT TTCAGAAGCA GAACCCGAAT
 135601 ATAGAATGCC ATTAATAATT CCTTATATACT TACATTCT TCCAGGTACT
 135651 TATAAACCTT AGTCTATTTC CAAAATGTAT TTAACAAACCT AACTTTCATC
 135701 CAAATTATTA AATTAAAAAT TTTCTTAAT TTTGAATTAT GATGTTAAAT
 135751 AGTTTCTATG TTATTCATA AAAACAAAT ACACCAAAAGA GTAGTTGAA
 135801 AGCTGGGCTAT GGTGGCTCAT GCCTGTAATC TCAGCATTT GGGAGGCTGA
 135851 GGTGGGAGGA TTGCTTTAGC CTAGGAGCTT GAGACCAAGCC TGGGTAATGT
 135901 GACAAAACCC CATCTCTACA AAAAATATAA AAATTAGCCA GGCATGGTAG
 135951 CATGCACCTG TAGTCCCCAGC TACTCAAGAG GCTGAGCTGG GAGGATCAAT

FIGURE 3-40

136001 TGAGCTGGG AAGTCAAGGC CTGCATGAGC CATGATTATG CTACCGCACT
 136051 CCAGCCTGGG TGACACAGTG AGACCCCTGTC TCAAAAAAAA AAAAACGCT
 136101 ACCTTTCTAT CTTTCAAGT AATGCTTGG TATGAAAATC CAGAGGAAGT
 136151 TACTTTATGA CAACGTAAAG GATATGAGAT CTTTTCTTC CTATCAAAA
 136201 AGGTTTATAT TTCAAGATCTG TTTCTAAGA AAAAAAAA GTCTGATGTC
 136251 TGAGATGTC GAATCAGTCC TGTGGCTGAT CTAGACCCCC TACAGAGCCA
 136301 CACTTGTCT CCCCTGGTA CAGCTTTTC CTTCTCAGG GTTACTTCGT
 136351 GACAACACTGG GCTCCCTATGA TGTGGCATTG TACCTCGCTG GAGTCCTC
 136401 CCTTATTGGG GGTGCTGTC TTTGTTTAT CCCGTGGATC CATAGTAAGA
 136451 AGCAAAAGAGA GATCAGTAAA ACCACTGGAA AAGAAAAGAT GGAGAAAATG
 136501 TTGAAAACC AGAACTCTCT GCTGTCAAGT TCATCTGGAA TGTTCAAGAA
 136551 AGAATCTGAC TCTATTATTT AATATCTTAC ATACCTCCAC CAGACTGGAC
 136601 TTGCTTTTG AATTTTAAGC AAGTTTCTT TCCTTTATA CAAATTGCAA
 136651 ATTCATATT TTTTAATCA CATCCTAGGA ATAGCACAAT AATTGGAAA
 136701 TAGAACCCCT ATCACTAGAA GAACCATTTT CTGCCACTAA ATATCTCTGA
 136751 TGTTCATG AGTCTGAGGG CAGAGACTCT GGATATGAA AACATGCTG
 136801 AAAGTCACAT ATTGTAAGAA TTTGAAGCTA TCTCAGTAAA AAGCAGCTT
 136851 GGAACACTGTG AATGATCTT AGCTTGTACA AATGTTAAA AATAACCTCAG
 136901 GCTACTGTGA AAGGGTTGCA GTTGGTTAG GAGTGGAAAT ATTGTTTG
 136951 TTAATGATGT CTTCAGTTCT GGTAACTCTG TTTTACTTTT TTATGCTCTT
 137001 TGGAAACTTT TTGCAAATT TAAGCTGGG TTCTAGATAA TACAGATCT
 137051 ACCTAAACCT CAAGTCTATG TAAAGTTGC TTTCCTGCTG TTAAAATAAGC
 137101 TATGATATTA AGATATTCTG ACTTGCTCCA GTGTCAAGGG ACCTTCTGGG
 137151 AGCAGGTGCT AACATAGTGT TCAGAACCAA TATGTTGAGAT GAAAAGGATC
 137201 CCCTCCAGGA GGATCCCTGAG CTGTTAGAA ATCATTAAAG TTTACAGGGT
 137251 TGTCCCTTT GCGTTTGCAAG TGCGTTTAC TCAAGTAGCC AGAAACACCC
 137301 CAGTTCTG AATTGTTTA AACTGTAACA ATAAAGTAAA ATAGAATGCA
 137351 TGAAAGATAT TCTGGGCGATT GTAACTTAGA ATTGTTCTGA CTTCTGGATT
 137401 TGTGGCACT AGAACCTGAT ATTAAACAA AGTCTTACTG AGCAGCTATC
 137451 AAGTGGCACT TACAGGCACA ATTGGTGGG GGCTGGAGGA TGGGGAGGGG
 137501 AGCAAAACCC TTTATATTG TGAAGAAAAT ATCTGTAGCT GATAGAAAATA
 137551 ATTGCTTTAA TGGTTTATG AAATTAAATGA GTCTGAAAAG GTTAAAAGCA
 137601 CTTATAAAA GAACCAAGTC CTACATTCC AGAACCTTCT GGCAAAATT
 137651 TGCACTCATA TTATTTATCC TATGAACATT CCCATTGTTT TTTTGTCA
 137701 TTATATACA GATTATCATA AGAAAGCTCT CAGTTTGAGG ACCAAAATA
 137751 AAACCAAAGT CATGCACTGA CCCATACTCA TTACAAAAAA CAAGAACACT
 137801 TTCTCTATC CCTAAAATTAA TGCTTTAGTA CTTGAGGGCT TTAAAAGTTA
 137851 GTGCTTTGA TTGTGAAGAC ATTCAAGAAC TTACTTTGTC ATACATGCA
 137901 TTGACCTTA CCACCTCTAA TAGTGTCTA TTTCATATTIC AGGGGACTTA
 137951 GATAATTGTC CTGTGGATGG TTCTTTGCA GGAAAAAAA TCTACATT
 138001 GACCATACTA CCCTTCATG TTCTTATTAT AAGCTTTAG AAAATGATT
 138051 CATTCACTA TGTCAGTTA TATAAAACGT TACTTTCTCA TTTTGTAGAA
 138101 GTTCAACAAA ACATACTACT AAGACCAATC ATCAAACCCA CTATTATAAA
 138151 GTTTAATTGTT GGCTGGGTTAA GGCTGGTTGC GCCTATAATC CCAGCACTTT
 138201 GGGAGGCTGA GGAGGGAAAGA TTGCTTGAGC CCAGGAGTTT GAGACCAAGCC
 138251 TGGCACACAT AGCAAGATCC TGTCTCTACT AAAAATAAAA AAAAAAATTA
 138301 GGCAAGCAT AGTGGCTCAT GCCTGTAAATC CTAGCACTTT GGTAGTCCAA
 138351 GGCAAGGGGA TCACTTGAGC CCAGAAGTTC AAGACCAAGT TGGGTAACAT
 138401 AATGAGACCC TGTGTCTACA AAAAATTAA AAATTAGCCA GGCATGATGG
 138451 TGCCCACCTG TAGCCCCAGC TACTCAGAGG CTGAGGTAGT GGAAGGATTG
 138501 CTTGAGCTTA AGAGATGGAG GCTGCACTGA GCTATGCCAC TGTACTCTAG
 138551 CCTGTCAC TGAGCAGAAC CCTGTCGTGA AAAGAAAATC AAAAAACAAA
 138601 AATAAATGTT AAATTGTTT TTAAGTTTA GCACAGACTC CCCTCAAAAC
 138651 ACCTTCTCC CAATTCTACA GAAAGTATT CAAAATGAA AACTTTACTC
 138701 TGAAAGACC TCTACAGTGT TTCTCTTTC AAAATTGGC TGATTTTGTG
 138751 AAAAAGTGA TCATCTGAAA CTAAAAGAAA TTGCTTGTT AGTTTCCATA
 138801 TAAACACAGC AGTGACAAGT ATATATAACT TAGATCTCTAG CATATGTGTT
 138851 TGTATATTAA ACTTCACATA TGTAGTTTC AGTTTAATGG AATGAATCAA
 138901 ACTGGATCTA TAACACTGAA AAAGTTCTAT TGTAAAGAC TCATACGGAG
 138951 AATACTCTGC TATAATAATA TAAAATTAAAG AAGAAAAAGT ATAAACGTA
 139001 GATGCTAAAT TCCATCAAATG CATATTAGT ACTATGTTT TTGTTGGGAAA
 139051 AGTTCTAAA GTTTAAAATG CACAAAGAAA ATGAAAAATA CTAATATAAA
 139101 AATTGCTGCT TTAATCTAGT CAAACTAAAT CCTTCTAAT TTCTGAATGA
 139151 AGTGTACTG CTGCAATAAA GTGACCTGTAT AAGCTAAAT TTTTGTGTT
 139201 CAATCCAGAC ACTTTCTGA GAGTCTGAAA AGAATACAGA GTCAAGACTC
 139251 TGTCTTATC TCCTCATCCT GTTTTGTATA AGACTCAGAA AATTCTCAA
 139301 TTGCAAGGT TCTGGCATTG GAGGCAAAAA AAAGCATGAA AGGGAGTAAC
 139351 ATTCCCTTTT ATAGATACTC TAGATTGGAT ACTATTGAA CAGATGGCA

FIGURE 3-41

10 / 506513

139401 AGAAACTTCC AGAACATT TTATTGCAAT GGATATTGCT
 139451 GGGATCCATC CATTAAAGCA GTAATATAACC ACCCAGATTA TTGATACCTT
 139501 ATGCAAGATG TGTTCATCTC TTTGATCATA TTTACAATGC TTACTCCATA
 139551 GCCCTGCTAC AAGACTTAAA ATT
 (SEQ ID NO: 3)

Feature:

Start: 2104
 Exon: 2104-2446
 Exon: 87054-87198
 Exon: 91571-92024
 Exon: 120932-121075
 Exon: 133151-133379
 Exon: 136340-136569
 Stop: 136570

Sim4 results:

Exon: 2104-2446, (Transcript Position: 1-346)
 Exon: 87054-87198, (Transcript Position: 347-491)
 Exon: 91571-92024, (Transcript Position: 492-945)
 Exon: 120932-121075, (Transcript Position: 946-1089)
 Exon: 133151-133379, (Transcript Position: 1090-1318)
 Exon: 136340-136572, (Transcript Position: 1319-1551)

SNPs:

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
352	A	G	Intron			
381	C	T	Intron			
3505	G	A	Intron			
10280	G	C T	Intron			
11107	G	A	Intron			
15750	T	C	Intron			
16004	T	A	Intron			
16871	A	G	Intron			
17163	T	C	Intron			
17966	A	G	Intron			
19392	C	G	Intron			
20113	T	C	Intron			
20434	G	A	Intron			
21243	T	G	Intron			
23009	C	T	Intron			
24699	-	T	Intron			
28058	A	T	Intron			
29600	T	C	Intron			
31455	A	G	Intron			
35653	T	C	Intron			
42700	A	G	Intron			
45516	G	A	Intron			
51789	C	T	Intron			
52042	C	T	Intron			
52139	T	C	Intron			
53089	A	C	Intron			
53117	C	A	Intron			
53434	-	T C	Intron			
55431	T	G	Intron			
55905	C	T	Intron			
60567	C	T	Intron			
60751	C	T	Intron			
60755	G	A	Intron			
63301	T	G	Intron			
64573	T	A	Intron			
76462	T	C	Intron			
77652	G	A	Intron			

FIGURE 3-42

77819	G	A C T	Intron			
79594	T	C	Intron			
84331	A	T T	Intron			
86107	C	T	Intron			
86175	A	-	Intron			
87109	C	T	Exon, coding	133	V	V
89444	A	T	Intron			
90535	G	A T C	Intron			
91163	T	A	Intron			
93488	A	-	Intron			
96065	T	C	Intron			
96351	C	T G A	Intron			
96701	T T	C A	Intron			
96879	T T	-	Intron			
97648	G	T	Intron			
97814	A	G	Intron			
98430	C	T	Intron			
101268	A	G	Intron			
103881	A	G	Intron			
103926	C	T T	Intron			
107845	C	T T	Intron			
109010	-	T	Intron			
109623	G	A C T	Intron			
110188	A	T C G	Intron			
111006	C	T A	Intron			
111223	A T	G	Intron			
111457	T T	C	Intron			
112168	T T	C	Intron			
112653	G	-	Intron			
114155	-	A T	Intron			
114181	-	T T	Intron			
114183	A	T	Intron			
115964	A	C	Intron			
118100	-	A G	Intron			
119631	A	G	Intron			
120833	T	C	Intron			
121125	A	G	Intron			
121245	C	T	Intron			
121521	G	T A	Intron			
124296	C	T	Intron			
124549	G	A	Intron			
124858	G	T	Intron			
125920	A	T T	Intron			
126266	A	G	Intron			
128258	G	T	Intron			
130303	C	A	Intron			
130617	C	A	Intron			
130910	-	T T	Intron			
131727	C	T	Intron			
132895	G	A A	Intron			
133506	G	A	Intron			
135473	G	A	Intron			
136201	A	G	Intron			
137080	A T	C	Intron			
138022	T	C	Intron			
138543	A	T	Intron			
138681	C	T G A	Intron			

Context:

DNA Position

352 GATGGTTAGCCAGGGATTATGGGTTTGGCAGGAAGACCAAGAGGTAAAGTACCATTTC
 CATCACATCATATCGGGGATACATTATCATCTAGTTGAGGTACTGTGTGCCATTTCATG
 ACCCTAAAGTTATTCCTCCCCCCTAACCTCCATCCTATACTCTTTGGAAGAAG
 TTACTACGCATACCCACACTTAAAGAGTAAACCATTGTACTTCACCTCCATGAGGGAGGG

FIGURE 3-43

AGTATGTCATAAAGTATTACATTCTGCAGGAGAGATTTGTCTATTCTCTCATT
[A, G]
TTTATTAATCATTTACTTACATCACTCGACTCGTGATAATTCTTACATATGTGTTT
GTTGTGTCATGCAAATATAATCGATGTGCTTCTTGCCTAAATAATGTTGTGGA
CAACTTCAAGTCATAAATACAGATGACCTTCAGAACCTTAGAGGTTAAAGTAAG
TACCTAATCAGTCCTTACCAATGTACATTATACTTCCAAATTTCCTTATTCACAA
TACTGGGTATCATCTTACATACATTTGTGCACTTATGTGCCATTCTTGTGTTT

381 CAGGAAGACACAGAGGTAAGTACCATTTTACATCACATCATATCGGGGATAACATTATCA
TCTAGTTGAGGTACTGTGCCCCATTGGCACCCCTAAAGTTATTTCTTCCCCCACTCC
CCCTTCCATCTATACTCTTGGAGAAAGTTACAGCATAACCCACACTAAAGAGTA
AACCATTTGACTTCACCTCCATGAGGGAGGGAGTATGTGATAAAGTATTACATTCT
GCAGGAGAGATTTGTCTATTCTCTCATTATTAAATCATTTACTTACATCAGTA
[C, T]
TGACTCGTGATAATTCTACATATGTGTTTGTGTCATGCAAATATAATCGAT
GTGCTTCTTGCCTAAATAATGTGTTGAGCAACTTCAAAGTCATAAATACAGATGA
CTTCAGAACCTTAAAGGTTAAAGTAAGTACATCAGTCTTACCAATGTACAT
TATACTTCCAATTTCCTTATTCACAAATACTGGGTATCATCTTACATACATCATT
TTTGTGCACTTATGTGCCATTCTTGTGTTACTATTACCCCTATTCTAAGGCAGAT

3505 GGCTGGTTAGCAAAAAACAAATCTAACGCTTCTGATGACACTTAAACATAAATTCTT
TCACCTTATCTGCAAGGTGAGCGGGTCAACCCCTTGGGTGAGAAAAGTGTAGCTCA
GTGAAAGTGTCTTGGGGTAGTGAATGGCAATAAAACACATATCAACTGACTTCAAGG
GCTAAGTGATTCCATTACTAAATCAACCTCCCTCCCACATTTGGGTAACTTTATAT
GATTAATAGCTTTTTTAAACCTTGTATTCTTATTATTAAAGTGAATATTCTTA
[G, A]
GTCCTTAGTATGATGATGAGGAATGGCAAGACTGTAAATAAATTCTGAGACAAAGGTAAAT
GCTGGGTTATGCTGAGGTTAAACCTGACATAAATACTTAAACTATTGTATCAT
TCTGCAACTTACTTTCTTCCATTCCATGATGTTGTACATTCCACATAATACCTC
AGTGTGAACGTATACTAAATTCTTCCATTAACTTAGGTGGTTGCAATTGTTGAC
TATATTATACTCTATGCAATTCTCCCTCTGATGGCATTAGATTGCTTCCAACCTCATTC

10280 TGGGAGGGAGGTAACTGGGGAGGTAACTGAATCATGGGGCAGGTTTCTGTG
CTGTTCTGTGATAGTTAATAAGTCATGAGATCTGATGGTTATAAAGGGCAGTTC
CTGCAACACTTCTGTTGCTGTGCACTGTAAGACATGCTTGTGCTCTCTTCAACCTTC
CACCATTGTTGAGGCCCTCCCTAGCCATGTGAACTGTGAGTCCATTAAACCTTTT
CTTATAAATTACCCAGCTCAGATATTCTACATAACAGTATGAAAATGGAGTAATACA
[G, C, T]
TCCATTACCATAAAGAAAAGCTTCTGATGACATTATTAAAGAGTAGCCTTGTTGAT
GTCATTACCTCCATGGATAGATAAGAAAAGTTGCAACTTGACAGTATTAGGATTGATATC
AGTATTACTTTATAAGTTGAACTTAAGAGCAGTTTGGCTGGAAAAAAAGTTGAC
TTATGTCAAAGTTGCTGAAAGTAGAATCTACTCTGTCCCCAGCTGAAAATATTAA
CTACATATTACTTGATGTTCTTAAAGATATTCTCAATAGTGTCTCTACTCAAGTC

11107 GGAAACTCAGCACACCTGGAACTGCGCAGACCCACACATAAGACAGATAGCTATCA
GTGGCTGGAGGAATGGAGGAAAGCACTGCTTCAAATGTACATGCCAAATGTGATGATC
ATACCTCTTGTAAAGTGCTTCTTAAAGCAAAAGTAATTCTCACCTGATATAG
GAACAAAAAAAGTGATGAAGAAATGGCTGGCTTATTTCAGTAAGAAGTCTTTT
TCATTCTACTAATTAAATTGGCATAAGTATGAAATACAGATTAGAAAATCTGAAT
[G, A]
TGGACCAAAGCAATGTTCTTGTGACCAAAGCAGTGAATCTTTCTCTCTTCT
CTTTCTTGTAAAGAGACAGGCTCTGCTCTTGCTCAGACTGGAGTGCAGT
CAGTGATGTGATGGCTACCCATAACCTCAACCTTGGCTCAAGGGATCTCTGGCCC
AACCTCTGAACAGCTGGGATTACAGGCACATACCCACACCTGGCTAATTAAAAAA
TTTTTGTGGGGAGGGTCTCTATATTGCCCAAGCTGGTTCAAATGCCAGCTCA

15750 TGGCTACTGCAACCTGGACCTCTGGCTCAAGTGATCTCCACCTCAACCTCCAAAG
TAGTTAGGACTACAGGGGATGCCCTACACGTAACATAATTGTATTGGTAGAG
ACAGGGTTTGCCTTGTGCCCCAGGCTGGCTGAAATCTTGCTCAAGCAATCTGTC
ACCTCAGCCTCTGAAAGTGCTGGCATTACAGGCTGAGCCACTGGGCCAGCTAGATT
TTTGAAATTGAAAAAGTAACCTGCTCCCTACTGAAGTAATAGAGTTAAAAAAAGTAA
[T, C]
CTGGTACAGACACCTGTATTCTGACACCCCTAGAAGAGTOCCAGGTACCCATAATCA
AATACATTAACATTTCTGCAAGCAAATGTATGGATAAGTGAGTTAAATAGAGACATGAG
TAGCTTCAGGTCACTTCAGATCAAGTTTGCTTCAATTAAATGTTGATATTCTCTACA
AAAACTTGGGTTGGGTTTCAAGATTGCAAAATAATTAAATTATTATTTTTT
TGAGACAGAGTCTTGCTGTGCTCAGGCTGGAGTGGCAGGATCAGGCTCACT

FIGURE 3-44

10/506513

- 16004 AAAGTAACCTGCTCCCTACTGAAGTAAATAGAGTTAAAAAAGTAATCTGGTACAGACAC
CTGTATTTCTGACACCCCTAGAAGTCGCCAGGTACCCCTATAATCAAATACATTAAACAT
TTCTGCAGCAAATGTATGGATAAGTGAGTTAAATAGAGACCATGAGTAGCTTCAGGTCA
GTTAGATCAAGTTTGCTTAATTAAATGTGTATTTCTTACAAAACCTTTGGTT
TGCGTTTCAGATTGCAAATAAATAATTATAATTATTTTGAGACAGACT
[T,A]
CTGTGTTGCTCAGGCTGGAGTGCCATGGCACGTCAGGCTCACTGCAACCTCAACCTC
AGGCTGAAGCCATCCTCCACTTCAGCCTCCAAAGTAGCTGGACTACAGGAGTGTCGA
ACATGTCAGCTCATTTTGATTTCTAGTAGAGACAGGGTTGGCCGTGTTGGCCAGGC
TGCTCCTAAACTCCTGGTCTCAAGTGATCCGCTGCTGGCCTTCCAAGTGTTGAGAT
TATAGGTGTAGCCACTGGGCTGGCAGAATTACATTATATGTCATATTGCTTT
16871 GGGTATGAACAACCTTATAACACCTGTTACACATTGCCAGATTATTCCTTAGAAAACCTTG
AATCAGTTTATTGTCACCCAGTGATGTGCTGGCTCTGAAAACCCCTACCAATGTTTGG
TTTTATTTTATTAGTTAGTTGCTAATTGATAAGTACTAATGATATTTTTAAAGTAGT
TTAAAATCATATTTCAGTGCTATAAGTCTGTTCCAGTTTGAGCCCTTAAAGC
TGCAAAATGACCTGGCAATTATATAATATTGAAAATACAAGAGGACATATGOCAGTG
[A,G]
TATATTAGAGTAAAACCTTCATCCCATAGGTAAATGAAGGAATGCTTGAGATTATCTAGG
CTTAGATTTCTCACCTGACACATCTGGCAGGTAGACCATGTCCTTGTCTCTGCTG
CTTAGGCCAGGTGTTGATCAAGGTCTGCTTAGGGGGGGTAGGAATGAAATAAAC
ATGTAGAGACTTGGGATGAGGACTTTGTTGATTCTCAGGTGACATCTCATCCTTCAGA
GGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTTTCAGTGCTATCACCTTGCA
17163 GCGAGTGAATATTAGAGTAAAACCTTCATCCCATAGGTAAATGAAGGAATGCTTGAGAT
TATCTTAGGCTTAGATTCACCTGACACATCTGGCAGGTAGACCATGTCCTTGTCT
CTCTGCTGCTTAGGCCAGGTGTTGATCAAGGTCTGCTTAGGGGGGGTAGGAATGG
AAATAAACCATGTAGAGACTTGGGATGAGGACTTTGTTGATTCTCAGGTGACATCTCA
TCCCTCAGAGGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTTTCAGTGCTATCAC
[T,C]
TTGCACTAACCTCTGGACTCGAGCTAATTCGTTGAAAATATTATTAAATTAAATT
GGTATGTTAAAATTTTGTGATGTTATTAGTTAGTTATTTATGAGACAGGGCTC
GCTCTGTCACCCATGCTGGAGTACATACGGTTGCAAGGCTCATGGCTACTGCA
CTTCCCAGGCTCAAGTGATCTCCACCTCAGCCTCTGAGTAGCTGGACTACAAGTG
ATGTACCCACATTGGCTAATTCTATATTGAGAGACGGGTTGCCACATTGC
17966 TCAAGCGATTCTCTGCTCAGCCTCCCGAGTAGCTGGGATTACAGACACAGGCCACTAT
ACCTGGTAATTTCGTTAGTTAGTAGAAATGGGTTTACCATGTTGGTCAGGTGGGT
CTCAAACATTGACCTCAGGTGATCCACCTGCTCGGCTCCAAAGTGTGGGATTATA
GATGTGAGCCACCATGTCAGCCACCCATTAAATTGAGACAAAATATGACTTGAG
AGCCACGCAAGAACAAATTGACTTATTGACATGCTCTGAGAGGTATGAGGGAAACA
[A,G]
AATGATACATAAGTAACCTCTGAGAGAAATATGCTGACATGCTAAATCTGTGCAAGTAAG
ATATAGGATTAGAGGAAGGGAGAATGACTCTGATTGAGCTGACTAGAGAAGGCTCA
GTTTTGAGTTAGGGTGTACCGAGATTGGGAGACTTTCTCAGCATATCTAACAGAAGAGG
GTATCCGAGGTGAGAGTGTAAAGGCTGGGCAAGGGTTGGGAGGCAGTTCTAAACTGAA
GTTCTGACTGTGGTTACATATGTTAGGTATTCTGTTAAATCTATCCAGTAATCT
19392 GAACATGACATAATGGAAACCCAGAAATCTGCTTGAGCGGACTCAGGGCTGCTTCTA
GGTAATTAGTTCTTCACTGAAATCATTATTTAAAGTATGCCGCACTGAGATG
GCCACTGTAGCTGCTGCCACCTCTAGCTGGCTTAAAGGAAATAGTAATAGAA
CTTCCCTAAATGTCTTCTAGCTTGGATTCTCTAATTCAAGTTGCGTCTCCCAA
GGGTCAAATTATATTCTACTATCCCTGCTTAGGTATTCTAAACAGTCTTAAGA
[C,G]
TTAGTCATTCTTCTCAATTGACATGACTGCTAAAGACTTTGGCATGTTCTCT
CTTCTCATTGATGTAATTAAAGTGGCTGTAAGTCTTATTCTAAAGATGTTCTAGAC
CAAGAGACTGTGAGAATAGCTTACAGTCATTCAACTAATTATGTTATTAAATTAA
GTATTGACAGTGGTAAAGGCTGGCAAGGGTTGGGAGGCAGTTCTAAACTGAA
AGTTTAGTAACGTGAGCCAACTACTTCATTCAAGTTCAAAATGAAACAGCTAATTCTT
20113 TTGAGAAAATATGGACTGTTTGTGACATTCTATAATGGACATTGAGGTTGTTAGGGAG
GAGGTGTCATCTTATGGACTTTCTGGCTGGGAAGGGAGTCAGTCCTAAATTGAGATAAT
AACTAGCCACCTGGCACACACAAGTGTGTTTGCCTTAGTTACCTGTCACACACTGAGC
AGTGAGACTCAAGAGAGTGTCAAAGTACTTTCAATGCTAAAGCACTACAGATCTGTC
ACACTGTGTGAGTGAGCAGGTTGGCACGGTGCTGTGCGGGGCTGTGTTGACTCA
[T,C]
GTGCTGCTGTGATCTCAGGACTCAGGTCTGAATTGCTCTGTTGACTGAAGGCC
AGCTGAAGGTGCTGGAAAGTGCACTGACCCCTGGAGGAAGAACAGTAACAGCAGAGGGTGG

FIGURE 3-45

10/506513

	ATGAAAGGGATTGATAGTTGTGAAGAATAGATATCTGCGGTTTGTAAAGCCAAGAC ACCTTACCCCTCCAGTAATTGTTCATCTTTAATATCATTGGCTTCATTTACAGAAT CTGTATTAAAGCAAAAGTCAGCATGTAAGGTGGTATTTGACCACATTTGCTGCTGTTG
20434	AGGACTCAGGTCTGAATTGCTCTGTTGTACTGAAGGCCAGCTGAAGGTGCTGGAAAGTG CACTGACCCCTGGAGGAAGAACCGTAACAGCAGAGGGTGGATGAAAGGGATTGATAGTT GTGTAAGAATAGATATCTGCGGTTTGTAAAGCCAAGACACCTTACCCCTCCAGTAAT TGTTTATCTTTAATATCATTGGCTTCATTTACAGAATCTGTATTAAAGCAAAAGTC GCATGTAAGGTGGTATTTGACCACATTTGCTGCTGTTGTGCTTCCTGGTGAAGTGA [G,A] TACTGGCTACTGACTAGTAAATATGTTTCTGACAATTATAAGGAAGGGAGAAAAGGA AAAGCCAATTAAAGCATTTCCTCAGAGTTGAAAAATAGAATTGCAATCTTT AAATTCCATGOCACACATCAGACAAGAGACTTGTAGTAGTAAAGGTGGGAATCA AAAGAACATGTAAGTGTGATATTGACTTCAAACATGGTGTCTATAATTAGTGT CATTTGTTACGTGTATGGTATTATAATTAAATTGATATGTGGTAGTTATTTGTAC
21243	TAAATTAAATCAGCGGTCACTAATCTTGATAATCACTCTATTGAGCTGGAACATACCTT AGTATTTGGAAAGCAAGTCAGTGAGTTAGACTGTCAAAACTGATCAGCTTCTAAGC TTAATGATAAGTGAATAGAAAATAGTTGCTTCAACCCCTTCCCTCCCTGCATTGAGCAT GATCATTCTGTAACCTTGAAATGGTTATGGAACAACAGTGAAAATACATTGATACACT GTCCTGGTAGATTTCAGATAGGTTAGACAAAGTTAGCAGGCCCTCTAGCTGG [T,G] GATTAACAAAGCTGCCCTCATAGTTAAATGTTGACCCCTGTTATGCAATTTCAGTTAC TAGAATTAGGTAAAGTTAGTGTATAAAATTGGTTAGTGTGGATTGTTAGGAAGTGAG TCCTTGGTGGCAGCAATTCTGTTATGCAATTAGATAACATATTGAACTAGTCAC ATTGTTTCACTGTTATTAGATGCTGGGGTGGGTATGGAATAAGAACGTATGA GGGGCTTGGAAAAGTCATGGAAAAATGTACACTATGAAAAAAACTGTGATGGATT
23009	TTCCTTCTTAATCTAAAAAAATTTAAAGGGCACTTATTTCTTCAGTTAAATGTA AAAAGGACTGCAATTGACATGATGATTAATTCTGGACCCCTCAATTCTTAAAGATGGACTA ATGGCTGGTATCAACTCACAAAGATCTTGAACTTGATGGAGCTATGTTGAGAAATGA AGTGTATATTTCATTATCTTTAAATTCTTACTCTTAAAGTGAATTGAGTTGAGGCCCCCTG TATACATTAAATCTAAGGGATAAAAGAAAGGAGGAAGTCTAGGCTGTGCTGCTGC [C,T] TAGGTACAGTGTCTGAAACACAGACCAAGTATTCAACCTTGAATTTGAGGTTTCCATT AGGAGGTTCTCAAAGAGAATAATGAGATTGCTATGCAAGGTGGAACTAAAGAGCACACGG CTTATTTATCATAATCAAATAATGCAATTCTATAACAAACTTCACCTGCTTATGACA TTGTAATTGTTGCTTGTATAAGCTTCCGGAGATAAGTAATTCAAGTAAAGTATT CCAATCATAATTGTTGCTTGTGATTGAGCAACAAACTATATGGATTGATTCACTG
24699	TTTAGAGGATTGGATGAATAGTGGTGTGCCAATAAGAAATTAAATATGGCTGATATT TCTTATTTAAAGAAAGACCAAAAGGGTCCATTGAAATGAGTCAGTGGAAATCTCTGA TGACTTCAGCCAGCACGCTTCACTGGCTGGATATATGGGAAGTGAAGTCAGTGTGTTATAG TCTGTGGAGCAGTGAATGGGAGGAAGAGATAGGGGTACAGGCTAAGAAGGGAGGAAGTCA AGTCAAAGGGAGAAGTAGGGTGTAGCTAGAGGAAGATTAGAGTCAGCGAGGGTAACAA [-,T] TTTTTTTTTTGAAGATAGGAGTAGCTTGAGAACTAAACTTAAAGAAGGCCCTGAGA GGGGAGGGAGGTGAAGTTACTAAAGGCTTAATTGATGGGGTAAGGTTATGAGCAGATCA GATCTTACAAGGAAGGTTCTGCTGGGGGCAAGATTCAAACACCCCTATTCAAGAACAG GAGAGAAGAAAGTAAGAATGGGAGAAATGTAGGTAGGTTGGTGAAGGATCAGGAAATGG AGGGGAAGGGTCAATTAAATGTTGCTGGGTGAGGAGATTGAGCAGATTGGAAGAGAATGGCA
28058	GCAAGGTGTTTCTGATCACATGGAAAGGGGAAGAAGAACAGCTATCAGGAGCTCTGGGGTT TTTTTGTGTTGTTGTTGTTGTTGCCACTTTAACTCTCAAGCTAAAACCTGGGGTTTC ATTGAGGAACCACTGTAATAGAAAATTCTTATGTCATTCAAGCTTAAACACTGTT GGTTACTTTGGCTTCTATTGTTGGGTTGTTGTTGAGTACATGCAAGCACTTGTG TGTTAAGGGTGTAAAGCAGACAGACAGTGGTACAGGTCTTGAATGGACTTCTGTC [A,T] AAAGTAATAGAGAAAAAGAGGAATACAATAAGGGAGGGACAGGGAAAGAGCAGAGTC ACAGGAAACAGTGAATGAGGTGCGAGTCAGTCAGTCAGCTCCCTCCAGTGTG TTGCTGCTTATGATGATGCTGGTTTCAAGCCACCTTGAGTGAAGTAAAGGGGGCT GAGGTCTAGTGCCTGGCTGGCTGATATGAGCAGCTTGCAATTCTGACTGGGGCCCTGGAG CAGCAACAGCACAGTTCCAGGAACAGTTCTCTGTCATTTTTATTCTGAGTCATCA
29600	ACTGCAACCTCTTAAAGCTACATTATTTAAAGTCACATACAAAGCAAGTTGCAAGAAC CTGTATGAGTGGATTCTATTTCATTAAATGATTTAAATTGATGTTCTTCTACACTT TTCCCTATGTCATCTTACCATAGCTGTCGCTTTGGTGGAAAGTGAGGACAGATTGCT TTCCACATCTCCATTGTTGTCAGTAAAGATGGACAAGTATGATTATCTTAA

FIGURE 3-46

GTAGTCATCAAACAAGGAAAAGGTTCTTGTGCTGGTTAGATGAAGTCTC
 [T, C]
 GCCCAGGCTGGAGCGAGTGGCACGGTCTGGCTCACTGCAACCTCTGCCTCTGTGTT
 AAGCAGTCTCTGCCCTAGCCCTGAGTAGCTGGGATTATAAGGCCCTGCCATCACGCC
 GGCTAATTGGTATTTGAGTAGAGACAAGGTTGGCAAGGCTGGCTTG
 AACTCCTGACCTCAGGTGATCCACCTGCCCTGGCTCCCAAATTGTTGGGATTACAGGG
 TGAGCCACTGTGCCGGCTGGAAAAAGTTTAATGGTAAAGATGTATGGAATGAATA

 31455 ACTTAATTGTTGGGAGCCAGATCTTAAAGGTAATTGAAATTCTCTTAAAGAA
 AATGGCAGACAGAACGGATGGGGATACTAGAAAACCTAAAGTAGTGCCTCTTGAAGAT
 AAAACTAAAACATTAAAGCCTGGAATTGCTTACAGTACATGTATTGATTATTAATT
 TTGCTTAAAGAAGTTGGCCAACACAATTACATGGAAGTTGGGTTATTGAAGAGG
 ATTGATAAAAAGAAGTGGAGGTAGGGCCAGGTGTTGGGTATGCCGTAAATCCCAGC
 [A, G]
 CTTGGGAGGGCCAGGTGGGATAACGGAGGTAGGGAGATGGACCATCTGGCTAAC
 ACGTGAAACCCGCTCTACTAGAAATAACAAAAAAATTAGCCAGCATGGTGTGGT
 GCCTGAGTCCAGCTACTGGAGGCTGAGGCAGGAATGGGTGAACCCGGAGGG
 GAGGTGAGTGAACCACTGCACTCCATCTGGGACAGAGCGAGACT
 CGTCTCAAAAAAAAAAGTGGAGGGTAAAGCCATGTGCAAGT

 35653 CTAATAGAAAAAAATATATATTGTCAAATATTCTGTTATTCAATTCAAAGT
 ATATTGGAATGTTATTCCAGGAATTGGAAATACAATACAACCAGCTTCTATA
 ACTOCACTTTAAGTGAGGCATAGGTCAAATAATGACAGCAAATGTAATGACACGTGTG
 CCTCTTACTCCCTGTTGGAGGAATTGGAGGACTCTGGTAACCTGTAGGCTGGATTAGT
 CCAGTTCATTGGCAGCAGCATTATCAGATTATTGTTGGCCGGCAACGGTGGCTCACAC
 [T, C]
 GGTAAATCCCGCACTTGGGGCTGAGTTGGCTGTTGCTTGGCCAGGAGTTCAAG
 ACCAGGCTGGCAACATAGGAAACCTGTCTACAAAATATAAAAATTAGCTGGGG
 TGGTGGCTGTGCTTAGTACCAAGTACTTGGAGGCTGAGGCAGGAGGATACCTGAG
 CCCAGAAAAGTTGAGGCTGGTCAGCTGATTATGCCACTGCAACCCAGCTGGGTGAT
 ACAGTGAGACCTGTTAAACAAACAAAGAGATTGATTGTTGAAAAACATAAGT

 42700 AGCTTTCTGTCCTACTGAGGCCAAAGGGGAGTGATACCCCTGAATTTCCTTA
 AAACAGGGTTCTTGGAAAGTTGTTCTTGAATCTTCTGTCAGTTAACCT
 TATCATCAATTGGTAGCTTCAATAATAATTATAATTAGTAAACATTATTGAGTG
 CTACGAAGAGCCAGTCCAAGCTTTTATCTCATTATTCTGCTACTTCCCTCAT
 TTACAGATGAGGAAATGAGGCACAGAGTGGTTAATTAACTGTTGAGGTCCGTAGC
 [A, G]
 GGTCACTGATGCCAGGGTCAACACCTACACTTAACACTAGAGACTGTTCTAA
 TTATTCCTCACAATCATATGTTAATGATTACTTATTGATTATTAGTGGCTGATAAG
 AAGAGGGAGGGTGTCTCTGTTGGAGAAGAAGGCTGGCTGATCAAGACACACTGGT
 GGTTGAAGAAAAATATAGATGTTAATTCCATAACACCACCTAAACATTCTACTG
 GAGGAGTCCACCTGTCGCACTGCAAGTCGGATGCAAGTAAGGAAGGTTTATTGAG

 45516 GTTACTAGCTATGAACTTGAGAAAACTACTCAATCTCTGTGCTTAATTTCCTAG
 GTATAAAGCAGATACTAAATTATGCCATCATAGGGTAGGTATGAGGTTAAATGAGTGAGT
 ATTGTAACACTAAACAGTCACTGACTTGGCTACCCCTTTGGTCCCCCTCCCT
 TGTTGTTATGGCTCAAGCTGAGCTTGGCTCGCTGTCACCACTGCTGCTGCTGCTGCTG
 [G, A]
 CAGACCCGCCGTGACTTCCACCCCTCTGGATCGGCAGGGTGTCCACTGCACCTCTGGT
 CCAGGGAGGTGGTGCCTTGGCCATTGGCTCCCAATGGCTAGGGCTTGGCTTGGCTG
 ACAGGGCTAAGTGCOCTGGTCTGCTAATTGAGCTGAATAGAGCTGTAACACTCACTGT
 ATGGCCCAAGGTTCCATTGGAAATCTGAGGCAAGAACCCAGGTAGAGAAGAA
 GAGGCTTGGCCCATCTGGAAAGCAGCCGGCCACCATCTGGAGCTCTAAGAACAGGA

 51789 AGAAGAACCGCTAGTATGGGTAATCCCTCCAAGAACCAAGCCCGAGTACTCAGAAGA
 AGAAATAGAATGGGAAACCTCATGAGGAGGTAGTTCTCTCAGGATGGCTAGCCACCA
 AAGAAGGAAAATACTTTGCTGAGCTAACCAATGGAAATTACTAAACCCCTCAT
 TAGGCATTGATAGCACCACAGATGGCAAATCATTATTACTGGACCGAGGCCCTTCA
 AAACATGAAGCAGATAGTCAGAGCCCTGTAAGTGTGCAAAATAATCCCTGCACTT
 [C, T]
 AGCCATGCTTCAATCCCTGAATCTTAACTCTTGTAAAGTTGCTCTTACAGAA
 TTGAAGCTGAAAGCTACAAATGGTCTTCAATGGATCCCAAGATGCACTATGACTC
 AAATCTACCGGGACCCCTGGACCCGGCTGCTAGTCCATGCTTCACTGTTGATGATATCA
 AAGGACCCCTCCCGAGGAAATCTCAAGTCAGTGCATGACCCCTAGTTGACCAAGTTGAG
 AAGCAGTTAGAGCGGCGGCGGCAACCTCCCCAATAGTACTTGGTTTCTGTTGAGA

FIGURE 3-47

52042 GATAGTCAGAGCCTGTGAAGTGTGCCAAAAAATAATCCCGTCACTTCAGGCCATGCATT
TCAATCCCTGAATCTTTAACCTCCCTGTTAAGTTTGTCCTTACAGAAATTGAAGCTGAA
AGCTACAATGGTTCTCAATGGATCCCCAGATGCAGTCATGACTCAAATCTACCGCG
GACCCCTGGACGGGCTGCTAGTCATGCTTCGATGTTGATGATATCAAAGGCACCCCTC
CCGAGGAATCTCAAGTGCATGACCCCTAGTTGCAACAGTTAGCAGGAAGCAGTTAGAG
[C, T]
GGCGGTTGCCAACCTCCCCAATAGTACTTGGGTTTCCCTGTTGAGAGGGGTTGCTGAGA
GACAGGACTAGCTGGATTTCTAGGGCGACTAAGAATCCCTAACGCTAGCTGGGAAGGTG
ACTGCATCACCTTAAACACGGGGCTTGCACACGTTAGCTAACCCGACCAATGAGGTAG
TAAAGAGAGCTACTAAATGCTTAATTAGGCAAAACAGGAAGTAAAGAAATAGCCAATC
ATCTATCACCTGAGAGCACAGGGGGAGGGACAATGATCAGGATATAAACCCAGGGTCT
52139 CTCTTACAGAATTGAAGCTGTAAGCTACAAATGGTTCTCAATGGATCCCCAGATGCA
GTCTATGACTCAAATCTACCGCGGACCCCTGGACGGGCTGCTAGTCATGCTTCGATGT
TGATGATATCAAAGGACCCCTGGGAGGAATCTCAAGTGCATGACCCCTAGTTGCAAC
AGTTCAAGCAGGAGCTTAGAGCGGGCTTGGCAACCTCCCCAATAGTACTTGGGTT
TCCCTGTTGAGAGGGGTTGCTGAGAGACAGGACTAGCTGGATTTCTAGGGGACTAAGAA
[T, C]
CCCTAACGGCTAGCTGGGAAGGTGACTGCATCCACCTTAAACACGGGGCTTGCACAGTAG
CTCACACCCGACCAATGAGGTAGTAAGAGAGGCTCACTAAATGCTTAATTAGGCAAAAC
AGGAAGTAAAGAAATAGCCAATCATCTATCACCTGAGAGCACAGGGGAGGGACAATGAT
CAGGATATAAACCCAGGGCTTCAAGGGCAACGGCTACCCCTTTGGTACCCCTCCC
TGTATGGGAGCTGTTTCACTCTATTAAATCTTGCAACTGCACAAAAACCAACAAA
53089 GATAAGTGAATCTCAGAGAACCTGGCCTTGAGCCAGCTTACAACAACTAACAGCTCTGG
CCCTTGGAGAATTCTTAATATTGTAACCTCAGCTTCTACCACTGAAATGAAGTT
AGTCCTCCCTGTCTGCAGGGTTGCTGCAAGGATTAAACACATGTATATGTACAAACCA
CTTAGCTCTGTGCTTGGCTATTGGTCTTCTTCTTCTTCTTAAAGACAGGGTC
TTGCTTGAATCTTGCTGAGGCTGGATTCAAACCTGGGCTCAAGTGAATCTCTGGCCTC
[A, C]
GCCTTCAAGTAGCTGGGACTACAGGCTGCACCACTGTGCCTGGTGGCAAGTGCCTGTTG
AATGTTCTTCTTCTTAGTCTCTCTAGCTCTCTGACAGTTTGGGCTTATGTATAT
AAGAAGGACTTGGTGCCTAGGGAGAGAGGATGCACTAGAGTTACATAGCTACCTCAC
ATCCTCCAAAAGCTGAATTATAAGTAAACAAAGTGAACCTTACCCATACTTTACACA
AAGTCTAGAATATTATGGTGCCTACAGGCTCACATACTGTGACCTTCTGAGATACTT
53117 TGAGCCAGCTTACAACAACTAACAGCTGTGGCCCTTGGAGAATTCTTAATATTGTA
AACCTCAGCTTCTTCTACAGCTGAAGATTGAAGTTAGTCCTCCCTGTCTGCAGGGTTGCTGC
AAGGATTTAACACATGTATATGTACAAACCACTTAGTCCTGGCTTGGGCTATTGGTG
CTTTCTTCTTCTTCTTAAAGACAGGGCTTGTGCTGAATCTTGCTGAGGCTGGATT
AAACTCCGGGCTCAAGTGAATCTCTCCCTGCTCACGCTTCAAGTAGCTGGACTACAGGC
[C, A]
TGCAACACTGTGCTGGCAGTGCCTGTTGAATGTTCTTCTTCTAGTCTCTCTA
GCTCTTCTGACAGTTTGGGCTTATGTATATAAGAAGGACTTGGTCTGGCTCAGGGAGAG
AGGATGCACTAGAGTTACATAGCTACCCCTACATCTCCAAAAGCTGAATTCTAAAGTAA
ACAAAGTGAACCTTACCCATACTTACACAAAGTCTAGAATATTATGGTGCCTAC
GGCTCACATACTGTGACCTTCTGAGATACTTTCTCTCCATTCTCTCTCTCTCTCT
53434 GTGGCAGTGTGTTGAATGTTCTTCTTCTAGTCTCTCTAGCTCTCTGACAGTT
TGGGCTTATGTATATAAGAAGGACTTGGTCTGGCTCAGGGAGAGAGGATGCACTAGAGTT
ACATAGCTACCTCACATCTCCAAAAGCTGAATTCTAAAGTAAACAAAGTGAACCTTC
ACCCATACTTACACAAAGCTAGAATATTATGGTGCCTACAGGCTCACATACTGTGA
CTTCTGAGATACTTTCTCTCCATTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
[-, T, C]
TTCCT
AAACATACCTGTATAGTTGAAGAGTAATTCTAAACAGTCTTATTAAGAAACAAATGCTCC
ATCCATGTACTGCAAAAGACATGACCTTATTCTCTCTCTCTCTCTCTCTCTCTCT
TTCTCTTATTTGGCCCTTCTCTCTAGACTAGACCTGAGAGATCTGTTCTTCTTCTGAG
ACAGCATCTGCTCTGTCACCAGGCTGGAGTTAGTGGCGTGAATCTGGCTCACTGCACC
55431 TAATTATTTATTTATTTATTTGAGAGAGGGCTTCTGTCACCAAGGCTGGAGTG
CACTGATGCAATCATGGTTCACTGCAACCTCAACTTCCGGCTCCAGTGAATCTCCCGC
CTCAGCCCTCCAAAGTGGTTGGGACTACAGACATGTGCAACCAATCCAGCTAATTCTAA
ATTGTTTTAATAGAGGTAAAGGGCTCACTATGTTGCTAGGCCAGTCTCGAATTCCAGG
GGCTCAAGGGATCTTCTGCTTGTCTCCAGAGTGTGCTGGATTAAAGTTGGGAGCAC
[T, G]
ATACCCACCCAACATAATTCAATTATTAATTTACATGTTTAGTATTCTTTGATA
GGGATGTGATGTTGGGTGAATAATAAGTAAATCAAAGACATATATTGAAAATTATGT

AGTTATTCTAAAAAATTAATTATTCACCTTATTTAGCAAAATCAGTGTGTTAGCATAA
TCAAGATATTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTAAGGATAAA
AAATAAAATATAATAGGAACCAGTATAAACAGTGGATTAAATTAAATGCAATACC

55905 AGCATAATCAAGATATTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTAAG
GATTTAAAAAATAAAATATAATAGGAACCAGTATAAACAGTGGATTAAATTAAATG
CAATACCAAGCTGGGTGCAGTCACCGCTGTAAATCCCAGCATTTGGGAGGCCAGGC
AGGCCAGTACCTGGGTCAAGGAGTCAAGACCAAGCTGACCAACATGGAAAAACCCAT
CTCTCCAAAATACAAAATAAGTGGGTGTTGATGCAATCCCAGCTACT
[C, T]
GGGAGGGGGAGGCAGGAGAATCACTTGAACCCAGGGAGGAGGGTTGTGATGAGGGAGA
TCACACCATGGCACTCCAGTTGGGCAACAAGGGCAAAACTCTGCTCAAAAACAAAAG
AAACAAAAAACACAGTACCATTTACATTAGCACCCCTCAAAATGAAATACTTAGGTATAA
ATCCAGAAAATAGGTATAAGAGATATATAAGTAAAACATAAAGCTCTGATGAAAGAAA
TAAAAGAACCAATAATGGACAGATATTCCATGTTGATGAGAACAGTCAAGTAATG

60567 TAAATATGACATTAAAAGCACAAACAACAAAATAGATTAATTGGACTTCATCAAAAT
TAAAACCTCTGTGCTTCAAAGGGCACCCAAGAAAGTGAAGAGAATCCACACAATGG
AGATAATTGGTCAAATCATGTATTTCACAAGACTGGTGTGCAAGATATAAGAAC
CTTGCAACTCAGCAATAAAAAGACAAGTAACACAATTAAAATGTTGAAAGGATTGAA
TAGACATTCTCAAAGAACATATAATCACAATGAGCATATGAAAATGACTCAAC
[C, T]
TCATTGGTCAATTAGAGAAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAA
AAAGATGAACAATAACAAATGTTGGCAAGTATGTGGAAAATTAGAACCCCTACACTG
TGGATGGGAATGTTAAATGGTGCAGACACTTGGAAAGTTGGCTATTCCCTAGAGATT
CCACATGGCACAGCAATTCTACTTTAGGTGTATACCCAGACAATTAAAAGATATATA
CAGGCCGGCGCGGTGGCTAACGGCTGTAATCCACACTTTGGCAAGGTGGATGGATC

60751 CAACTCAGCAATAAAAAGACAAGTAACACAATTAAAATGTTGAAAGGATTGAAATAGA
CATTTCTCAAAGAACATATAATCACAATGAGCATATGAAAATGACTCAACCTCA
TTGGTCAATTAGAGAAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAAAAA
GATGAACAATAACAAATGTTGGCAAGTATGTGGAAAATTAGAACCCCTACACACTGTTG
ATGGGAATGTTAAATGGTGCAGACACTTGGAAAGTTGGCTATTCCCTAGAGATTACCA
[C, T]
ATGGCACAGCAATTCTACTTTAGGTGTATACCCAGACAATTAAAAGATATACAGG
CCGGGGCGGGTGGCTAACGGCTGTAAATCCACACTTGGCAAGGTGGTGGATCACGA
GGTCAGGAGATCGAGACACTCTGGCTAACAGTGAACACCCCTACTCTACTAAAATAC
AAAAAAATTAGCTGGGGTGGTGGGGGGGGCGCTGTAGTCCCCAGCTACTCGGGAGGCTGAG
GCAGGAGAATGTCGTGAAACCCGGCAGGGGGGCTTGCAGTGAGCCAGATTGGCCACTG

60755 TCAGCAATAAAAAGACAAGTAACACAATTAAAATGTTGAAAGGATTGAAATAGACATT
TCTTCAAAGAACATATAATCACAATGAGCATATGAAAATGACTCAACCTCATTTG
TCATTAGAGAAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAAAAGATG
AAACAATAACAAATGTTGGCAAGTATGTGGAAAATTAGAACCCCTACACACTGTTGATGG
GAATGTTAAATGGTGCAGACACTTGGAAAGTTGGCTATTCCCTAGAGATTACACATG
[G, A]
CACAGCAATTCTACTTTAGGTGTATACCCAGACAATTAAAAGATATACAGGGCGG
GGCGGGTGGCTAACGGCTGTAAATCCACACTTGGCAAGGTGGTGGATCACGAGGTC
AGGAGATCGAGACCATCTGGCTAACAGTGAACACCCCTACTCTACTAAAATACAAA
AATTAGCTGGGGTGGTGGGGGGCGCTGTAGTCCCCAGCTACTCGGGAGGCTGAGGAG
GAGAATGTCGTGAAACCCGGCAGGGGGGCTTGCAGTGAGCCAGATTGGCCACTGACT

63301 TCTTACAGAAGTTGGCTGCTCTGGGACAGTGTGTAACAGTGAACAAATGATGTC
TAGACTGGGTTCCCTTCTCCACCCCTGTGTCGTGTCCTGGCAAGTTGTTAACCA
ACCACTTTTGCTCAGTTCTTATCGGAACAAGGAGAATAAGAATACTTCAATCAGGC
CAGGGGTGGTGAACGAGCTGTAATCCACGGCTTGGGAGGCCAGGTGGTGGATCAC
CTGAGGTCAAGGAGTTCAAGACCAAGCTGGCAACATGGTGAACACCCCTACTCTCTTAC
[T, G]
TATGCTGGCTGATATTGATGTCATGGTAGAATTGATACTGCTTGACAAAGCAGCCTA
TTTCAGTCAGGACCTTCTCTCTAGTTCTCTGTAGCTATTACCTAGCTTCCATT
CATTCCTCACACTACAGATACTCTATTGATAAAGGAATGATGTCCTTATGCTTCAAGC
ATTCTGGCAAGTTAGTAATTCAACTATGATTCTAGGTCAAGACAAAACAGTTATGAACAT
AAGACTGTTTTAATCTCTCTGGTCCCCAACACCCACCCCAATCAGGAGAAACTA

64573 CCTCACCAACCCATTACTTTGTTGACTTTGAGCAAGCTTTAAAACGTCAGTGTCTAGTT
TTGTCACCTGAGTAGATACCTCATAGAATTGCTGTTGATATTAGTGACTTAATCTATG
GGCTGAATTGCTCCAAAAGTTCAATTGTTGAAACTTAATCCCCAGTGCAATGTTAA
GAAGTGGGACCTTCAAGGTGAAATTGAGCTATGAGGGCTCTGCCTTCAATGAATGGATTAA

FIGURE 3-49

TGCCGTGTTGAGTAGTGGGTCCCTATAAAAGGAAGTGTGACCCCCCTTCCCTGCC
[T,A]
CCTCATGCATGTGATGCCCTAGCCATGTATAATGCAGTAGTAACGCCCTTACCAAGACA
CTGGCTCCCTGATCTGGACTCTCAGCCCTCAGAAGTGTAAAGAAATAAAAGTTTTCT
TTATAAATTACCCAGTCTCGGTATTCTGTATGGCAGCAAAAAACAGACTGAGACACTT
AATATATATGAAGCATTAGACTGTCTGGCACATTGTACATTAAATCCCAGATATCGA
TATCATCAATATCATCATCATCATCTGTGGCTGTATAAACCTCCCTCTGCATTAA

76462 GCTGGGCTTGGTCAGCTCTTGGCTTATTTCCAAACAAAGAAACCTCTGGGTTAC
GGGACCCCTGTTTACTCTATCACCTGGCAGGATTGAGGATAATTGCCAGAACTAGA
ATATTGATCCAGATTTTACATCACCCATCCCTTGTGTTCTGAGCTGAGCTGATG
ATCACTGGTTGGTCACAGAAATAAGCAGGGTAGTCTAAATGAGACAAAAACTTAA
AACAACTAATGAGACTAGAATTAAATGAAAAGTGTATGATAAAATTGAAACATAATT
[T,C]
CTCTCTCCAGTCCTCATTTGTTAAACAAACATGATAGGACTGAGTCATTGAGA
ATAAAACTTTAGTCCTTATTTGGCTGGTTATTGATCAAAGCAGCAAGAATAATTAT
TTTACACAGGTTTAAATTGCTTGTGAGACTCTGTTCCACAAGGAATTTCAGA
TAAGACCTTTAAAGCTGAGCCACGGCATGGTTGTATCTCAAAACTATGAGTTGG
GTAATTCTCTCTGAGGTCCAAGATAACATGGGTTCTGGGCTATTAGAAAG

77652 TCCCATAGCTGATTATAAACCATCTTGTAAAGGATCAAATAAGACAATTGTCGTGA
ATGACAAAATGCTTGGGTAATAACAGTCAGGCTGATTGACAAAGAAATTGGGTA
TTTCTGAGCTTACAATAACACATAATAATTTTTTTTTTTTTTTTTTTTGAGACGG
AGTCCTGCTCTGTCGCCAGGCTGGAGTGAGTCAGTGGGGATCTGGCTCACTGCAAGCTC
CGCCCTGGGTTCAACACCATTCTCTGCCCTAGGCTCCAGTAGCTGGACTACAGGC
[G,A]
CGGCCACTACGCCGGCTAATTGTTGTTAGTAGAGACGGGTTTACCGGTTT
AGCCGGATGGCTCGATCTGACCTCGTGTACCGCCGCCCTGGCTCCAAAGTGC
TGGGATTACAGGCGTGAGCCACCGCGCCGGCAACATAATAATTGAACTGATGATA
GCATATACTCAGACATTAGAATTAGAAACCTCATAGAATTGGAACATATGTTATT
TCATTAAAATATAACCTGAAGAAGATTAAACATTATTATTGGAATCCCACATAA

77819 TTTTTGAGACGGAGTCCTGCTGTGGCCAGGCTGGAGTGCAGTGGGGGATCTGGC
TCACTGCAAGCTCGCCTCCGGGTTACACCAATTCTCTGCCCTAGCTCCAAAGTGC
TGGGACTACAGGCGCCGCACTACGCCGGCTAAATTGTTAGTAGAGACGG
GGTTTACCGGTTAGCGGGATGGCTCGATCTGACCTCGTGTACCGCCGCCCTGG
GCTCCAAAGTGTGGGATTACAGGCGTGAGGCCACCGCGCCGGCAACATAATAATT
[G,A,C,T]
ATTACGATTGATAGCATATAACTCAGACATTAGAATTAGAAACCTCATAGAATTGGA
ACATATGTTATTCTTAAATATAACCTGAAGAAGATTAAACATTATTGTTATTG
CAATCCACATAACTAAACATGTCACTTAATCTGTTACCTCTTTGGATGCTCAG
GAGCCCTGTAGTATTCAAAAGTAAGGGGTCAGAAAAGACAACCTTGAAACTGAAGTT
GATTGGGAAGCCTGTTAAGTACATTAGAGGTTAAACACTTATATTGAAATACA

79594 TAGTTTATTCTCAGAAAATTTGATCTAAGTGTATTCTTAAGCCAA
TTAATTAGAGCTTTTATACAAACATCACACATATTGACATATATAACTACACAGA
CAGAGGATCAGTAGTTGTAAGATTCTCATTTGTCATCTCTAATTAGATTACTGAC
TCAGGATGGGCCCTCAAGAGCAGGGCTAGGAAAGCATGCACTTCTAGGGCTAA
ATAGTTAGCTGGAGACAAAACAGATTGAGAGGGATTATGCTTTAATT
[T,C]
GGTTTCTGAGGAAACAGAGGTTTCTAAATGGGTCAGTGGTGCTCTTCCAT
TTTCCAGGGAGTCCAGGCCATCAGAAGTTCTTAGGGCTCTCATGGTGCAATTAA
GAGAGGCAAGACAAAATGGAGAAAAGTAATTCACTGACTGAAAAGAAATCTTCC
AGTGAACAAAGATGCAAGAAGAGGAAAACATAGAGGCCCTTAAATATGCCCTAGCTG
GATATCCACTTAAATTAGCTGACTTTTACCATAGTGTCTTATTAAAAATCCTT

84331 ATTGACCAAAAGAATCAAATGGGCCGTGAGTGTCTAGTGTCAAGGGAAAATT
TCCCCACTGAATAAAATTAAAGAAGGCACTGCAAGACAAGAAGCTATATTGATTATAC
CTGTTAGTGTATTCAATAGACACATAAAATCTGAATTAAATATTGTTAGAAGT
AGGTGAATCCACAGTAATTCAAGAAAATTGTCAGGCAAGGGTTTGTCTTCTT
CTTTCTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT
CTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT
[A,T]
GTAGGATGACCTCGGCTCACTGCACTGCCACCTGCCAGGTTCAAGCAATTCTGTG
TCAGCCCTCTGAGTAGCTGGGATTACAGGCACTGAGCCACACGGGGGGCTAATT
TTTTAGTAGAGACGGGTTGTCATGTGGCCAGGGCTGGCTTGTCTGACCTCAGG
TGATCTGCTGCCCTGATCTCCAAAGTGCTGGGATTACAGGTGTGAGGCCACCATG
GCCAAGGTCTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT

FIGURE 3-50

86107 TCAAGACCAAGCTTGAGTAGCAAAGTGAGACCCCTGCTGTACAAAAGAAACACACACAAAAA
GAAATATGACTGACTAAAATACATATAATTTCATAATACTTAAAATGTAAGAAGGCAA
AAAATTCTGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGAACAGCCTGG
CAACCTGGCAAACCTTGTTCTACAAAAGTACAAAATTAGCCAGGCATGGTGGTGC
CACCTGTGGTCTAGCTACTTGGAGATTGAGGTGGAAATTGCTTGAGGCTGGCTGT
[C,T]
GAGATCACAGTGAGCTGAGTTGCCACTGCACTCCAGCCTGGCAGGGAGTGAGACC
TTTCTAAAAAAAAAAAAAGGCAAAAATTAAATTATTAGTATGGTAAAGTT
CGTTGGACTTAATATGAAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTAAC
TTCTTCTGTAAGAAAATAGAGTAGTACTAGAGACTTCCAGAGCTGCATAGAGCTC
AGGGTCATCTACCAAGACAGACAATTGTTGTCATCATCAGTGTAAACTCTAAATTATT
86175 ACTGACTAAAATACATATAATTTCATAATACTTAAAATGTAAGAAGGCAAACAAATTTC
TGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGAACAGCCTGGCAGGCTGG
CAAAACCTTGTTCTACAAAAGTACAAAATTAGCCAGGCATGGTGGTGCACACCTGTG
GTTCAGTACTTGGAGATTGAGGTGGAAATTGCTTGAGGCTGGCTGTGGAGATCA
CAGTGAGCTGAGATTGCCACTGCACTCCAGCCTGGCAGGGAGTGAGACCTTTCTC
[A,-]
AAAAAAAAAAAAAAAGGCAAAAATTAAATTATTAGTATGGTAAAGTTCTGTTGGA
CTTAATATGAAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTAACCTCTTGT
CTAAGAAAATAGAGTAGTACTAGAGACTTCCAGAGCTGCATAGAGCTCAGGGTCA
CTACCAAGACAGACAATTGTTGTCATCATCAGTGTAAACTCTAAATTATTAAGTGCTT
ATGTGCCAGATACTGAAGTTATATACACTTTCTAACTCTTAATAATTCTAGAAAGGT
87109 AAAAGATTTAACATATCTATGGTTTATAAAATGATTATAAAAATAAATACCCAGTAACAT
TATCCAGGTAGCAAAATTCTACTAGTGTATGAGTCATTTCCATGGCAAAAGAACTAA
GCTTAGGCACATACTCAAAAAAAACTAAAAAATTTCTAAATGTGTATTATATCA
ATGGAATAAAACAAATATAACCTACCATGTCTAAATCCCCACGCTTCCCTCTT
TACAGCATGGTAGGTTCTCTCCATGGGTGATTTCCTTGTGCCAATAGTCAG
[C,T]
GTCTCACAGACCTATTGGTTGTOGGAAAACAGCTGCTGGGTGCTGCTGTTGGATT
GTTGGGCTATGTCAGTTCTTGTAAAGGTAGGACTTGGTTTCTATGTTGCTTT
AAAAACTGTTAGATACCTTAAAGTTACTTCAAGAAACTATGCTATTACAGCAAAGA
TCCCTCTTCTATTTTAAACTTAAAGCAATGACTTATAAAACAAACTGTTATC
TAGCAGCAAATCAGAGCTTGAGAATTGAATGCTTTTCTTGTAAATGCCAAGACTT
89444 ACTTATGAACTACTACCTAGTTGTTAACAAAACACACATACAAAGCAATGTTTCA
AAATTCTGACCACTGAGCAATAAAAATTATGACATATATTGATGTCACCCAGTTCT
GTCTCTCTTCTACCCCTAACTGAAACAAAATTATGAAACCAAATTCCCTACT
ACATGTAATATTCTCATATATTCTATTAAATTGCTATTAGCTTGCTGATCAAAGGCT
ACTGAAACTTGAGAGCAAGATAACAGGAGCAAGGGAAATGTGGTATAGATTCTGAGTGTC
[A,T]
AGTGGCAGGTCCATTCTCTAGCTTCACTGCTTCTGAGGAAACCTTCTCCA
ACAACCTGGTCATCACACCCATGTCCTTCTCTGAATCTTGTGACATATGATTGG
TATCGACACGCCATTACTCATTTACATTGCACTTATTGGCTGCCAACAGTCACAAACTGG
AACCATGTTACTGAAGGGAAAACCTGGAGTGAAAAGGGTTCAGCAGTAGTGCAAATA
CCATCATAAAGCTCATATACCTCACTCTGAGGAGGGAGAAGCTCTGGTTTCAACT
90535 TTTTTTTTTAAATAGAGATGGGTTTGTCTATGTTGCCAGACTGGCTCAAGCCAT
CCCTCTGCTTGGCACCACCAAAGTGTGGGATTACAGGTGAGCCACCAAGCTGGCCA
AGGACCCAGATTAAATATTCTTCTCACAATGTATCTGTAACAGTAGTTGCTTAATA
TGTTGGCTAAACAAAGTGGAGATTCAAGTAAAGGTGATCAGAGTGAGGTGAGATTAA
TTGGGAAAGCTAGAAGTGATTCTTGAGGCTGATTGAGGTGCTAGCTGTGGATTAA
[G,A,T,C]
TAGAGGGAGAAGGGCATCTCAGAGAGAGGATTGCCAACATGCCITAATTTCAGATTC
TAGAGTTCTTATGATTACCTCAGCATGTTGCTAGACTAGCATTATTATCAAAATTITA
ATTATTAAACCAACTTTAATCTTACTTTCTAACAAATTGTTGCTTTACTACTGATAGCC
TTTCAAAAACCTTAAACTAGTTTATTCCCTACCATATAATTGTTCAAAGAACATAATGA
TATGATCTTATCTCTAACAAATGTGCAATTATTGGTTAAACTGTAAGATTATTAA
91163 GCCTTACAGCTTACAAACTGGGATCACTAAAGGAATACACTTAAATTGCTTCTGTA
GTCAGAAATATGATTCTTGTCTTGCAACATACTGAGAACAGTGAGTACAGGGCGAA
GGTTGGCTCAGGCCATTAGGCCAGCAAAACAGGCCACAACCTGACCTCTGTGCAAATGT
TCCCTGACATAACCTTGGGAAAAAATATAAAATGCGGCCCTTTCTTACTACCTTGT
GGTAAGTACCTGGAAAAACTCCATGAAATAATTAGATTCTAGTTAACTCTAACCTT
[T,A]
AAAAAAATGTTCTTGTGAGACTAGGTTTGTGTTAAATTGAATCACTGTTGATTTCAC
CTTCCCTGGCACCACCTTATTCTGAGCTGTTGGAGGAGCACAGTTCTCACTCAGTGCTG

FIGURE 3-51

TGTGGTCACTGAAATCCACAGAACAGGGTGGCTGAACAAAATCACTGATGACCTTAAT
 GTTATTTTTCACATATTAGATTAATTAACGTTAGTGCTACATGCTTAGTTA
 CTAGTTTCCCTCATTTGGTTATTTTTTTTTGGTTAACCTTACTTGTAG

93488 CTACATCCTGATCTGATAGTCCATTCTACTATTAGGAAAGTATAGGCCAACCTT
 AAGGTAAGTTCTGGATATAGATCTGTTGACAGGTTAACCTTACCCATCCAACCTC
 TTTCATAGCTTCTGAGTCAGAGAACATTATTGTGCTCTTCTTAAAGATGAGTAG
 AAATTCTTTCTTTCTTTCTTCCAGACAGGGCTTGTAAAGTGTCAAGGCTG
 CTTCAAGCAACCCCTCTGCCTCAGCTAGGTTACAGGTCAAGGCCACACCCAGCTT
 [A, -]
 AAAAAAAATCTCTTTGGTACTACCACATGAACACACCTAGAGAAATCATAACTCAGCT
 TTGCTAATACTAGACATTACCAAAGGAAAGTGGTAGATGACTGTCTAGTTATTTTG
 TTATATATTATAATTGTAATTAAATTACATATATTACTCATTGACTTACAAT
 AAACCAAGTAAAGCAGATAAAATAATATTAGCTCAATTACAGACTGAAAAACAGATC
 TATTGTTAATAGAGACGTTAAGTGTATTCCAAGAATTACATGTCAGTAAACAGCAGAGC

96065 GCATAAAAATGGGAGTTATTTAATGTAAGGCAATGTATTGCCAACCTTGAGATAGAAGT
 AAATTTGAAAGGAGAAAGATAATAACCCATTGGAAAAGTGGTTTAAAAGTTCTAG
 CATTGGAGTTGGCCTTGAGCATGAGATTGTGACAAATCTGATCTTGATCAACTAG
 GGAACTAACCTACCAAGTTAGGTCTTGAAGATTCAAATACAATGGAGTGCTCTCATT
 GCTATGTTAAAATTCTAAGATCTTATTAGATTGTACATGATGATTGAGAGAAATATG
 [T, C]
 ATGCTTGCTTCAAGTGAGGTGGAGGTTTGATCTCTGCTAGTTGACGTTCAAAAG
 AAGAATTAGATTGCTCTGAAAGCTAAATTACCTTCTTCTTCTAGGCTTCCACTAA
 ATCTTTTCTAGGATACAAATCTTATAGATCAATTAGATGAGGCTAACTTCTAA
 AACGATCCCTAGTAGCAGCTGCATCAGTTTATGAATTGCCCTTCTGCTGAGAGTTG
 TTTGTTTGTCTGGAATCTTTTGTGTTGTTGCTTGTGTTGTTGTTGTTGTTGTTG

96351 TGAGAGAGAAATATGATGCTTCAAAAGTGAGGTGGAGGTTTGATCTCTGCTAGT
 TGCGTTCAAAAGAATTAGATTGCTCTGAGCTAAATTACCTTCTTCTAG
 GCCTTCCACCTTAAATCTTTTAAAGGATACAATCTTATAGATCAATTAGATGAG
 GCCTAACCTCTAAACGATTCTAGTAGCAGCTGCATCAGTTTATGAATTGCCCT
 TTGCTGAGAGTTGTTTGTGTTCTGGAATCTTTTGTGTTGCTTGTGTTGTTG
 [C, T, G, A]
 TTTGTTTGTGTTCTGTTTGTGTTTGTGAGACGGAGCTTGCTCTGCTCCAGGCTGGAGT
 GCAGTGGTGCATCCCCGCTACTGCAACCTCTACTTCCCGATTCAAGTGATTCTCTG
 CCTCAACCTCTAGTAGCTGGATTACAGGCGCTGCCACACACTGACTTAA
 TGTTTTTAGAGACAGGGTTTGCACATTGGCCAGGCTGGTCCCACCTGAC
 CTCAGGTGATCCACCCATCTGGCTTCCAAAATGCTGGATTACGGGTGTGAGCCACCA

96701 CAGGCTGGAGTGCAGTGGTCAATCCGGCTACTGCAACCTCTACTTCCGGATTCAAG
 TGATTCTCTGCTCAACCTCTAGTAGCTGGATTACAGGCGCTGCCACACACCTG
 ACTTAAATTGTTAGTAGAGACAGGGTTTGCACATTGGCCAGGCTGGTCCC
 GAACCTCTGACCTCAGGTGATCCACCCATCTGGCTTCCAAAATGCTGGATTACGGGT
 GTGAGCCACACGCTGGCTCTGGTTCTGGTTTCTTTTTTTTTTTTTTTTT
 [T, C, A]
 ACGGCTCTCTGACTCTCTCATTAGCTTCAAGGAGCTAAACTCTTGGTTCTGC
 CTACCTCCACATCACTCTCTTAGTTCTGCTACTCTCTTCTCCACTGACCC
 CTGAATATCAGCATGCTCTAGGGCTGTCCCCCTGATCTTCTCCATGATTCTACTGG
 TGGTTTCTCCAGTCTCTAAGTTACATCACGTATATGCAATGACTCAAATTAT
 AATTCTGGTCCAGACCTTCTGAAATCTCCACCAAGAGCTGTATATCCAGCTGCTTAC

96879 CGGAACCTCTGACCTCAGGTGATCCACCCATCTGGCTCCAAAATGCTGGATTACGG
 GTGTGAGGCCACCAACGCCCTGGCTCTGGTTCTTCTTCTTCTTCTTCTTCTT
 TTAACGGCTCTCTGACTCTCTCTATTAGCTTCAAGGAGCTAAACTCTTGGTTCT
 TGCTTACCTCCACATCACTCTCTTAGTTCTGCTACTCTCTCTTCTCCACTG
 CCCTGAATATCAGCATGCTCTAGGGCTTGCTCCCTGATCTTCTCCATGATTCTAC
 [T, -]
 GGTGGTTTCTGACCTCTAAGTTACATCACGTATATGCAATGACTCAAATT
 ATAATTCTGGTCCAGACCTTCTGAAATCTCCACCAAGAGCTGTATATCCAGCTGCTT
 ACTTAAACATCTCCACTCTGGTAACTGCTAGGTGTTCAAGACTTACCCCTGCTAACCTG
 GGTCTTGATCTTACCCCTTAAACTACTCTGCCCCCAGGCCATCTCATCTCAGGAGCTG
 GCAATTCCGCTCTTCAAGTCAAAACTTGGAGTCATCTTGGCTTCTTCTT

97648 TTCTTCTGCCCCGGGAGTTGTTCTCTATGAAAGAACGCCACAGGCATTCTCTAA
 CATAAGTCACCTCTGCTCAGATCTCAATGGCTTCCATTCTCTAAGGAAACCA
 ATATCTTACAGTGACCTACAAGGCTTCAACAAATCTGGCCCCACTACCTCTCGAGCT
 TCCATCGCTGCTCTGCCCCACTCTGCTCTGCTTCTGCTTCTGCTTCTTAAATGGGCTACTCT

GAATACCTGTTGAAACTTCTGGTCCCCCTTCCCGTAGTATTCAACAAACGGCTCTTA
[G,T]
TACTCTTCTTTGTAGCACTTAATACTTCTAACATTATCTATTTACTTCTTT
ATTGTAGTCATTGCTACTATCCGTATATTACACGTCGCTAGAATGAAACACCACAA
GGGTAGGATCTATTCATTAGTGGTAGATCCAAGCATCTAGCACAGTGCTAGCACA
CACTGGGTGCTAAATATTGTGAATGACTAAATATATTCTGGGTAGTCTGAAGTGAC
ACTGTATAAGTAATGTCTATTTTCTACATTTGGATCTTAAAATCTACTTGTATG

97814 TACCTCTGGAGCTTCCATCGTGTCCCCCTGCCACTCTGCTCTGCCATTGGCTTTTA
ATGGGCTCACTCTGACTACCTGCTGAAACTCTGCGTCCCCCTTCCCAGTATTIC
ACAAACGGCTCTAGTACTCTCTTTCTTTGTAGCACTTAATACTTCTAACATTAT
CTATTTACTCTTTATTGTAGTCATTGCTACTATCCGTATATTACACGTCGCTAGA
ATGAAACACCACAAGGGTAAGGATCTATTCAATTAGTGGTAGATCCAAGCATCTAGC
[A,G]
CACTGCCTAGCACACACTGGGTGCTAAATATTGTGAATGACTAAATATATTCTGGGT
GAGTCGAAGTGACACTGATAAGTAATGTCTATTTCTACATTTGGATCTTAAAAT
TCTCTACTTTGTGCTATAATGATTTTACATTCTGACTTGAGGACATGGTGTATT
AATATTATTCAACTTATTCAACAAATAAGCTAAACTAAGGAAACCTCGGAATAATT
GAGTAACCAGTAATGCTGTCGTTGATGGAGGAGAGTTGGTGTGTTTGCTCTGATT

98430 GAAATTAAAGATAAAATAGAAGAAATTCTGGTCCCCCTCAAGTAACCTGTCCTTCAGTAC
CACTGAAAAATCTCAAAGAGTCGGAGTGGTGTGTTAAGAATAGGATGAGGATGAGA
ACCATAACCAGGOCTCAGGTCTGCATAGCTTGGCGAGCATTGAGCATAGGGCTCGTG
AGATAACTGATAAAATGCCAAATATGACAATGATAATGCCAAATATGACAATGATAAAATG
CGGAAAGATGACAGTGACAATGATAATGAGTTACAAAAATGATGGTAACCTCTCAT
[C,T]
GGCATGAAATGCTCTATCTCAATCTGAAGCTGATGATGTTAGTTCACTTACTCTCATCT
CTCTCCCTGCTACTCAGATTGAAATCAGCTACTTAGTACCTGTTCTTACTCTAG
ACCATATCATTGGTCAATTCTAGTTAAATTAGATCCACATGGTCTCTGTC
GAAGATGACTGACTCATATTGAAATCTGAAATATGATTCTAGGCTGTTTTAAA
AACTCCTTATAAGTGGTTGACTTTGTGGCAGATAGTAATTGACTGTTCTCAAAAGAAA

101268 CTTGTAGTCACTAACTCTAAGGATCATAGAGCATAAGGGTAAGCAGGCCCTCTATGTAT
TCATGCTATCAGGAAGGGCTTTAGCACCCAAACAAAGTTCTAGGGCTGACATTGCTG
ATGTGTTAACCTCTAGCTGGCATCTATTACCCCTATGCTTCCCCACTTTC
TATCCCTATCATTATCTCTGGCTTTGGCCCTCTCTGGCAGCTTACTTGT
ATTAGAAAGTTATATTCCCTCATACATATTGAAAGTGCTCATTTAAAGGGCAATGC
[A,G]
CACAAATTGGAGGTGATAATTGCAAACATGAACTCCCTATATCTCTGTTATGCAATCC
CTGATCTGATCCATGTTAAATTGAACTGATGCTTTGAAGTAAAATGGAAGAA
CAGTGGCAACATCTAGCTTCAGAGCATAGTTAAGATTGGCCAATCTCCAACCCA
TGCAATGGTGTGCTTGGAAACACAGGTTCTTGGACAAATACAACATTATTCC
GCATTCTTTGATTAAACATTAGTTAACATTATTAAACATTATTAGTCACAAGA

103881 ATGGTAAGAGATGGTAAGAGACAACCTTGGCCAGTCAGGGACAACCTCATTGAAAGCTG
ATAGTAAGTACATCTTGGTAAAGGGTAGTATAAGGTAATTGAAAGTACAAAATAA
GACAGCTTCTATTGGCTTGGGAGGCCCTATAACAGAATTCTCAAGTCCTAAGGCCAA
TCAAGAGTTGATTCTTATCCAACCTTATTAAATTGATGATTATTAAAATCTGCA
TATCAAAATGAAAATGCTTGCACTTTGCTGAGCTTACAGGCTTACAGGCTTACG
[A,G]
TATACTGCTTAACTCTGTTTACACTGCTAATAAAAGACTTACCTGAGACCAGGTAAATT
AGGAAGAAAAGAGGTTAATGGACTTAAAGTCCACATGGCTGGTAGGCTTACAGTC
ATGGTGGAGATGGAGGAGGATCAAAGGCTACATGGCTTACATGGCTGGCAGGAGGGAGTAT
GTGCAAGGGAACTGCCCTTATAAAACCATCAGATCACATGAGACTTATTCACTGTCACG
AGAATAGCACAAGAAAACCTGCCCCATGATTAAATTACCTCCACCGCTTGTCCCC

103926 CTATTGAAAAGCTGATAGTAAGTACATCTTGGTAAAGGGTAGTATAAGGTACTTTG
AAGGTACAAAAATAAGACAGCTTCTATTGGCTTGGGAGGCCCTATAACAGAATTCTCA
AGTCTCTAAGGCAATCAAGAGTTGGATTCTTATGCACTTCTGCTGAGCTTACAGG
TATTAAAAATCTGCTATCAAAATGAAAATGCTTCTGCTACTTCTGCTGAGCTTACAGG
CATTTGTTCTTCTCATACATGCTTAACTGTTTACACTGCTAATAAAAGACTTAC
[C,T]
GAGACCGAGTAATTAGGAAGAAAAAGAGGTTAATGGACTTAAAGTCCACATGGCTGG
GTAGGCTTACAGTCATGGTGGAGATGGAGGAGGATCAAAGGCTGCTTACATGGTGG
CAGGCAGGGAGTATGCTGGAGGAGGACTGCCCTTATAAAACCATCAGATCACATGAGAC
TTATTCACTGTCACGAGAAATGACAAGAAAACCTGCCCCATGATTAAATTACCTCC
ACCAGCTTGTCTTCAATTGATGATGTTGGGATTATGGGAGCTACAATTCAAGATGAAATTGG

FIGURE 3-53

107845 ACCTTCTCTCCCTCACTTTGTCCTACTTTTCTAGATTTTTCAATGATGTCTATGC
TTTCTCTGTTTTCTAGCTTTCTAACCTTGATTTATTTCTTCAGATCTAACAT
CTGCTGCAATTGACTGTCAGGTTAGTGACAATTGCCATTATCAGTTTGTGCTT
AGCGAGTATTCAACAGCATTCTCTACTTGAGATGAATAAGGATCTTATTTATCTGACC
ACTTGTTTACTCATGGGACATTAAATTTACAGAACACTTCAAAACAAGC
[C, T]
TGTTTTCTTCAAAATATAATATACTAGCATAGGAACCTGACAGAAGAGGTAAAT
ACAGAAGAAATCTAGAGAACGATGATGGAGAAATAAATAAACAAAAGCTGCTG
TTATAGTAAGGTAGCCAAGTTGTCCTGTGTTCAAATTATACCTAGCCAAAATAAAT
ATTATAGATAATTGAATAGTAGTTTGTAGAAATGATTGATTACTCAGGGGTGGA
ATTATCCCTGTAATGTAGGGCCCAAACCTCTAAAATATTATAATTGTGAGGGAGAAAT

109010 AGGTTTAAACCTTAAATAATAGAAATAAAAGTGAATTATAATTATCTAGAGTAGTTCA
ATGTGAAATAACTTAAAGGTATGGAAATGGATGCAAGAAGTATAGTCAGTCTTGCTGGA
GTAAAATAATGCCCAGTGCCTTGTGCCCTCTCCCAGCTGCTGCTTCCAGAAGAACGGGT
GTCTGAGTGTGAAACATCACCCAAACAAGTAGGTAAACAGATACTCAGGGCCCTCTTGACCC
ACATACATATCAGTGGGATTAGAATGTCGCCACATATTGATGATTGAATTATGAAGCA
[-, T]
ATAATATCCTCAATAATAAAACCAAGTGTCCCCGTCCCCACTTGTATCTCTGCTTCTGTG
AACACATGTTCTTTATATGTCCTTACTCTCTCAGGTGCTCTCTCAGGGACTTTCTAG
TTCTGACCTTGTCTTTCTAGCATTCTCAGAGGACAATTCTAGCTTCTGTGATT
CCTCAAGCATTAAATTGCTTTCTGCCAGATATTCTCTGCTAGGCTCTGAGGCCCTCA
GAGCTGTTGTAATTGCACTGGGATTGCCCCAGGATTAGGAATCACCTAATGTCCCCA

109623 CCTTGTGAGGCACTCTCAACTCTGCATCCCCCTATACCTTCACAGCAACCCGTGTGACCC
AAAGCAGTGTCACTCTGGTGCCTCTTTCTCTGAAATAAAATTCTAGATAAGAA
GACCTCTATATTCCAGGCTTGTCTTGATTAGGAAAAAAAGAAAACCTACCTATAT
ACATAATGTTTAAATCACTGAAATGTCCTACTCTGTTACAGAAAGGAGAAATAAAGAA
GTAAGTTAAATGCCCTGGGATACGTGCTACACATGGATGACCATGAGGACATTACACCAA
[G, A, C, T]
TGAAATACTCCAGGCAAAAGCAGAATACTGTATGGTTCGGCTAGATGAGGTACCCA
GAGAAGTCACATTCTAAATAACTGTAAAGTTGTATGGTGGTTCCAAGGGGAGGGGGAAAT
GAGGAGTTATTAATGGCACAGAGTTCTAGCTTGAGGGAGGTGTGACAGTTGTACAA
CAATGTAATGTACTTAAATAGTACACTTAAATGGTTAAATGGAAATTATGAA
TAGGAATTATCACGATAAAAATTTAAAGTAAGAAAAGTTACTGCTTGGCGAAAGTA

110188 TAAAAAGTAAGAAAAGTTCTGCTGGGCGAAAGTATATCAAAAAATAAAAGTCCC
CACAAATTCCAAAACAACCCCTAATGAGGTGTGCTGCCCTAAATGGTAACCCAAATTGTG
AACCAATGTGAGTGTGAGACTGGAAACTGATGCCAAGATTTAGCTCTAATAAGG
AGTAGAGTTCTATAATTGACTCCAAAGACATTCTCTCTGCTCTGAGGCTGCCCTAAG
ATTCCCAGTCCAAAGAAGTTCTCTCTGCTCTGAGGCTGCCCTAATCCAGAGTACACA
[A, T, C, G]
GCCTTCCATTCTTATCTGCTCTCTACCAAGGGTGTGGTCTTCTCTGTAACACTG
ACTGTATAATTACAGACAAAAACTAAACATATTAAATATAGGCACTCTACATCTCA
AGGTTCCACATCTGGATTCAACCAACCATGGATTGAAAATTTGGGGAAAAAA
CAATAAAAAAAACACTGGCTGGCAGCATAGTGAGATGCCATCTCTACAAAAACATTAAA
ATATTAGCTGAGCATTGCACTTGGAGGCTGAGGCAGGAGTCACTGAGGTCTAG

111006 AAAAATAAAAATAAAATAAAATTAGCTGAGCATAGTGGCATGTGCCATGGTCCCAGCTA
CTTAGGGGGTTGAGGTGGCAGTGAGCTGTGATCTGCCACTGCACTCCAGCTAGGCAAC
AGCGAGACCCATCTCAAAACAAAAAATAAAACAGAACACAGATTAAAACAAAATAC
AGGCTGGGTCACTGGCTATGCCCTATGGTAAATCCCAGAAACTTGGAGGGCCAAGGTGGAGG
ATTGCTTGTGCTCAGGAGTTAGATCAGCTGGTAACACGGCAAGACCATCTCTAC
[C, T, A]
AACACAACACAGGAGACTATACTTCTAGGGACCATTTCTGGGATCATAGTTGTAC
TAGAGAAGTTCTCTGTGAGGCAATTAAATATAAAATGCAAGATAATCTTACATA
GCATTTCACATTGTATTGGTTATTATAAGTAATCTAGAGATAATTAAAGTATAACAGGAGG
ATATACATAGGTTACATGCAAATACTACACCATTTATATAAGGGACTTGATCATCCATA
GATACGGGTATCTGAGGAGGTGTGGGTTAGCTCCACGGATACCAAGAGACTAATGT

111223 CTTTGAGAGGCAAGGTGGGAGGATTGCTTGTGCTCAGGAGTTTAGATCAGGCTGGGTA
ACACGGCAAGACCATCTCTACAAACAAACAACACAGGAGACTATACTTCTAGGGACCA
TTCTGGGGATCATAGTTGTACTAGAGAAGTTCTCTGCTGAGGCAATTGAAATATAA
AAATGCAAGATAATCTTACATAGCATTCTACATTGTATTGTTATTATAAGTAATCTAG
AGATTAATTAAAGTATAACAGGAGGATACATAGGTTACATGCAAAATACTACACCATTT
[A, G]
TATAGGGGACTTGATCATCATAGATAACGGGTACTGAGGAGGTGTGGGTTAGTTCTC
CACGGATACCAAGAGACTAATGTTAATTCTACCTTCCCCAACCTCCACACAGAACCTG

FIGURE 3-54

AATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGAAATGATA
ACAGTGGAAAGGAAGCTGATCTAGGCCTACTCAACAAATTAAATCTCATCTGGTAA
AACAAATTAGATTATGGGTCAAATTGAGCCAGCAATTAGATGGCTTAGGATTAAT

111457 ATCTAGAGATTAATTAAAGTATACAGGGGGATATACATAGGTTACATGCAAATACAC
CATTTATATAGGGACTTGATCATCCATAGATAACGGGTATCTGAGGAGGTGTTGGGTC
AGTTCTCCAGGATACCAAGAGACTAATGTTAATTTCATTCCTCCAAACCTCCACACAGA
ACTCTGAAATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGGA
AATGATAACAGTGGAAAGGAAAGCTGATCTAGGCCTACTCAACAAATTAAATCTCATTC
[T, C]
GGTAAAAAACAAATTAGATTATGGGTCAAATTGAGCCAGCAATTAGATGGCTTAGG
ATTAATAAAAAAGACTGAACATCATGCCCTCCAAAGACTGAGGGAAAGAGATAGATAGG
AGACTTTGCAAAGTAGCACTTAGCCAACATCATTAGCCTAAATCTTAGTGAAGAGAGG
TTAGAAGAAGGTTAGAATTTCATGGAAAGGATCCATTTCCTCACTTCAGAATTAAAGG
AAAAATTAGGAAGCTAATAAGAACTAATGCCCTAATTCTTGTCTTCACAAATCA

112168 CAAGTTACCTCAGATCCCAGTGATTTAAATAATGTTCTGAATGATGATCCTTTCTGTT
TAAGAAGAAGCTGTTAGGTTCTGTTCTATAAAAGAAATACCTGAGGGGGATGAT
TTATAAAGAAAAGGGTTAATTGGCTCACGATTCTGCAGGCTGTATAGGAAGCATGGCC
CCAGCATCTGCTCAGTTCTGGTGGAGGTCTCGGGGAGCTTTACTCATGCCAAAGCAG
AGTGGAAAGCAGCAGGTCACTTGATGAAATTGAGAGCAAGAGTATGGTGGGGAGCTGCCA
[T, C]
ACTCTTAACCCAATCTAGTGAACACAAGCAATAACTCACTTATCAACCAAGGGATGGT
GCTAAGCCACTTGTGATGGATCCACCTCCAAATCCAGTCACCTCCACCAAGGTOCCACC
TCCAACATTGGGAATCACATTCAACATGAGATAATGGAAGGGACAAACATTCAAACCAT
TCAGAAGCCTATCTTAGGCTGGCACGGTGGCTCAGGCTGTAAATGAGCACTTGTGAGA
GGCCGAGGAGGAGCAGATCATTGAGGTCAAGGAGTTGAGACCAGCACGGCAACATGGT

112653 AAGCCTATCTTAGGCTGGGACGGTGGCTCACGCCCTGAAATCGCAGCACTTGTAGAGGGC
GAGGCAGGCAGATCATTGAGGTCAAGGAGTTGAGACCAGCACGGCAACATGGTAAAC
CCCATCTACTAAAAATACAAAAACTAGCTGGGATGGTGGCACACACCTGAAATCTCA
GCTACTCGGAGGGCTGAGGCAAGGCTCTTGAACCCCTGGCAGAGGTGAGGTAA
CTGAGATTCTGCCACTGCACTCCAGCTGGCAACGGAGTGAGGCTCTGCTAAAAAAA
[G, -]
AGAAGCCTATATTAACCTATAAAATTAAATATCATTCAACTAGCCTTTGTGGGTGC
ATTITGTTCACTTTGGACTATTTCACAAATTCTGACAGTCGTGCACTCTAAACATG
AGGATATGTTCTGAGAAATGCACTTCTAGGCAATGTCATTGTTGTGAAACATCATAGAG
TGTACTTACACAACCCATCATGGTAGTCACTACATACCTAGGCTATATGGCATAGGA
GAGCCTATTGCTCTAGGCTACAAACCTGACAGCATGTTACTGCACTGAATGCTGTAGG

114155 TAAAAATTAAATAAAACTAACAGATAAACCTTCTTGTGAGGAAACAGAACAAAT
TTTGATAACTTGTGAAATATCTGGCACAGAAATTATTTAGAGCCACTAAATAATTCAA
ATTACCTAAAAATCCTAGTGATTTATTTCTATTTAAAGATGAAGTCACTTTAAACTTC
TAAAATGAGGGTTATTAAACTGGCATCTAAATCCAAGCTGGTTGGTTGGTAATTCC
TCTAGGACATTAACTAAATCTGATCTTATCTAAATGATGCTATGTCATAGATGGACTG
[-, A, T]
TGTGTTGTTGAACTCAGGGAAATTAAAAAAACAAAGTAGAAATAAAAGGCT
TTAAAGAATTAGAGTTAGAAATGTTCAAAATTAGGTTCTTAAACCATAGGCA
TCTCTCTCTGAACTCTCTCTGCCCCCTGGTAGCTATGAAATAATCTGCATT
CCAGAAACTCTCTTCTGAACTCTCTGCCCCCTGGTAGCTATGAAATAATCTGCATT
TACACCATGAAACCCATCTTAAATGAAATGAAAGATCTGCTGTTAAAAAAACAAACAA

114181 AACCTTTCATTGTCAGGAAGGAACAGAACAAATTGATAACTTGTGAAATATCTGGC
ACAGAAAATTATTAAGAGCCACTAAATAATTCAAAATTACCTAAACCTAGTGATTTAT
TTCTATTTAAAGATGAAGTCACTTTAAACTTCAAAATGAGGGTTATTAAACTGGC
ATCTAAATCCAAGCTGGTTGGTTGGTAATTCTCTAGGACATTAACTCTGAT
CTTATCTAAATGATGCTATGTCATAGATGGACTGTTGTTGTTGAAATCCAGGGAA
[-, T]
TAAAAAAACAAAGTAGAAATAAAGGCTTTAAAGAATTAGAGTTAGAAAT
GTTTCAAAATTAGGTTCTTAAACCATAGGCACTCTCTCTGAACTCTCTT
TCTGCCCCCTGGTAGCTATGAAATACTGCACTCCAGAAACTCTCTTCTGCCCCAGTCT
TTTCATGCTTAAACAGTGCCTGATGATTATCTACACCATGGAACCCATCTTAAATGA
AATGGAAAGATCTGCTGTTAAAAAAACAAACCAATCACCCATGCTCTACAGTCC

114183 ACCTTTCATTGTCAGGAAGGAACAGAACAAATTGATAACTTGTGAAATATCTGGC
AGAAAATTATTAAGAGCCACTAAATAATTCAAAATTACCTAAACCTAGTGATTTATT
TCTATTTAAAGATGAAGTCACTTTAAACTTCAAAATGAGGGTTATTAAACTGGC
CTAAATCCAAGCTGGTTGGTAATTCTCTAGGACATTAACTAAATCTGAT

FIGURE 3-55

TATCTAAATGATGCTATGTCATAGATGGACTGTTTGTGTTGTAATCCAGGGAAATT
 [A, T]
 AAAAAAAAAAAAAACAAAGTAGAAATAAAGGCTTTAAAGAATTAGAGTTAGAAATGT
 TTCAAAATTAGGTTCTTAACCATTAGCCATCTCCCTCTGAACTCTCTTTTC
 TGCCCTTGGTAGCTATGAAATAATCTGCATTCCAGAAACTCTTTCCAGTCCCTT
 TTGATGTCCTAACAGTGCATGCATGATTATCACCATGAAACCCATCTTAATGAAA
 TGGAAAGATCTGCTGTTAAAAAAACAAACAACATCACCCATGCCCTACAGTCCCTG

115964 GTAGAGGGTTGTTGCTCAGTTCTGCCAGAAGACAGTTGAGTTATTTAGTCCCCAC
 AGTCTCTACTCCTCCCTGGCCCTGTTTGCCCTGTTCCCTGGCTCTGTATACGGCCT
 TTGTTAGCACTTTGTTGAGCTCAGTCACTGTTACTCCAAGTCTCTGTCAAGAAATAAG
 TTACTTTGTTGAAGAGCTCAGTAATCCCCCTCTTTAAACTATGACTCCCCAAA
 GATATATAGCTAACTTGTGTGCACCGATTTATCATATTATTAATAAAATTCCATA
 [A, C]
 ACCTTACATAAAAGATAATTAAACAAAAAGTACTCACCCCCCTTAAAGGAGGAAGATAATG
 ACCATCAAGGCATGCCAAATTACACAGTCTTACAGGAAACAGTACAGTAGGTTATTATGG
 ACCTTTTGTAAATGGCATCTGTTGAGGTGTGACCCACTGCACTTCACAGG
 TTCTGTAATAAAAGTATTGGGGTCCCTCTGTTGAGCATCTCTATCGTAAACCC
 ATTGGTGTAGAGAAGCTTGAGTTCTAATGCATGTTGGCTTATTGGAGCTGCTT

118100 GTGGTGGCTCATGCACTTAAAGGAGCGAAGCAGGGCAGATCACTTGAGGTAGGAGTTT
 GAGACCAGTCTGGCAACTTGGTGAACATTCTACTCTACTAAAAATAACAAAAATTAGCTG
 GGCGTGGTGGTGCACACCTGTAATCCCAGCCACTCTGGAGGTGAGGGAGGAATCGCT
 TGAAACAGGTAGGTGGAGGTTGAGCTGAGATCACACCACTGCACTTCAGCTGG
 CGACAGCGAAACCCATCTAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATA
 [-, A, G]
 CCTCTCTAGTTGAAAAACTAAGTCTACCTAACGATAATTGGTTACCCATTAT
 CTCTCTCAAATAACCTCAAACATTCACTTAACTCTTAAAGGTTACAAAGTAG
 AGCAGGGGGAAATAAAACCACTAATAAGAATAATAGCCATTGACAGACAGGTGTT
 CTAGTTCTAaaaaaaaaAGATGCTGGTAGATTAGCTTATGAATACTAAAGAAT
 GCCTCTTATTGTTGTTGGAGACAGGTTCACTGAACCTAACCTGGTCTCAAGG

119631 GTAGGTAAATAAAGGTACAAAGATAGATTAGCAACAGATTACGGAGAGCTTGAATACCA
 TCTAAGGAGTGAATGTAGGCACTGGGCCACCTTGAATAAGGAATTGATGAGATTAAA
 GCCATATTAGGAGGATTCTGACCCAGTATGAAAACACAGAAGTTAGGAAAACAGT
 TAATAGTTGAAAGAGAAGAGAAAAGGAGATGGTGTGGGATACATAAAATGGCTTT
 AAAATGCAAATGAGAAGTGTAAAGAGATATCACCCAGAAAGTCTATGCACTGCCAC
 [A, G]
 TGGCACTATATGGTGGTTGATTGGTGGGAAATTGCTGAGACTTCCAGAACTCA
 GACCAATGTTGGTGGGGGGACGGTATTGTCAGGATTATGAAAGGTCAAACAAAT
 ATGCTCACTGGCTATCTATGGCCACAGGTCACTGTTGCTCTGTTATAAGTACACTAAG
 TGGAGGAGAAGGTCTTAAAGAGAAGCTAAATTAACCTGATTGTTATTAAAC
 TGTGTGCCAAACACTGTTCAAGCTCTTACACAGACATTATTAATCCTCGCAACCA

120833 CAGCCTCCCGAGTAGCTGGATTACAGGCATGGTCACCCAGGCTGGTAATTCTAT
 TTTAGTAGAGATGAGGTTTCAACAGTTGGCAGGTGGTCTGAACCTCTGGCTCAG
 GTGATCCACCCACCTGACCTCCAAAATGCTGGGATTACAGGGGTGAGCCACCATGCC
 GGCTTAAATGCTTTAAAGAACTAAACATGTTAATTCTCAAATGTT
 CATGAAAATTATCACAGGACAAGTTCTAAATATTGAAATTGGAAAAGTTGCAAGCC
 [T, C]
 ATAACATTTGAGAGAAGCAAATGCATTGATGCAAAGCTCAAATTGTCAGTTCT
 ACCATATTCTAGTGTGTTCTCTCTGGCTATAGATGAAACATGAAATGAAAGAT
 TTCAAGATGAAAAATAAAAGAGGTGTTCTCATGTCATTGGGTCACTTCAGGAGTTG
 GACGACTGCTTGGGGGATTGAGATTATGCTGGTGAAGAAGGTTATCTAC
 AGGTACTTTTACACCTTCTCCCTATCAAATTACTCTCATACCCAAATGTCCTCA

121125 TGCAAGCCATAACATTGAGAGAAGCAAATGCATTGATGCAAAGCTCAAATTGCA
 AGTTTTCTACCATATTCTAGTGTGTTCTCTCTGGCTATAGATGAAACATGAA
 ATGAAAGATTCAAGATGAAAAATAAAAGAGGTGTTCTCATGTCATTGGGTCACTT
 CAGGAGTTGACACTGCTTGGGGGATTGAGATTATGCTGGTGAAGAAGGTTATCTAC
 TTATCTACAGGTACTTTTACACCTTCTCCCTATCAAATTACTCTCATACCC
 [A, G]
 ATGTCCTAAATGACTTACATGCTAAATTCTTTCTCTCTCTCTCTCTCTCT
 GAGATGGAGTTGCTCTTATTGCCCAGGCTGGAGTGCAATGGCACGATCTAGCTCTCC
 GCAACCTCCACCTCCCCGGTCTCAAGGGATTCTCTCTGCTTAGCCTCCAGGTAGCTGG
 TTACAGGGGTGTCACCAACACCAAGGTAATTGTTGTTAGTAGAGATGGGTT
 TCTCCATGTTGGTCAAGGCTGGCTTGAACTOCTGACCTCAGGTGATCTGCCGCTGGC

FIGURE 3-56

10/506513

- | | |
|--------|--|
| 121245 | ATGAAAGATTCAAGATGAAAAAAAATAAGAGGTTCTCATGTGCATTGGCGTCAGT
CAGGAGTTGGACGACTGCTCTTGGCCGGATTGCAGATTATGTGCCCTGGTGTGAAGAAGG
TTATCTACAGGTACTTTTACACCTTTTCCCCATCAAAAATTACTCTCATCACCC
AATGTCTCATTAATGACTTACATGCTTAAATTCTTTCTCTTCTTCTTCTTCTT
TGAGATGGAGTTGGCTTATTGCCAGGCTGGAGTGCATGGCACGATCTAGCTCTC
[C, T]
GCAACCTCCACCTCCGGGTTCAAGGGATTCTCTGCCCTAGCTCCAGGTAGCTGGG
TTACAGGCGTGTGCCACCACACAGGCTAATTCTGTATTCTTAGTAGAGATGGGGT
TCTCCATGTTGGTCAAGGCTGGCTTGAACCTCTGACCTCAGGTGATCTGCCCGCTCGGC
CTCCCCAAAGTGGCTTAAATTCTCTATAAAAATGAGAAATATTCTACAACATAACCTC
TATAGGCAGTTTCAAGGACAAAATTAGTTATTAGTTGGGTTAAACATGAGAAATT
 |
| 121521 | TGCAATGGCACGATCTAGCTCTGGCAACCTCCACCTCCGGGTTCAAGGGATTCTCT
GCCCTAGCTCCACAGGTAGCTGGATTACAGGCGTGTGCCACCACACAGGCTAATTCTT
GTATTCTTAGAGATGGGTTCTCCATGTTGGTCAAGGCTGGCTTGAACCTCTG
CCTCAAGGTGATCTGCCGCTCCCAAAAGTGGCTTAAATTCTCTATAAAAATG
GAAATATTCTACAACATAACTCTATAGGCAGTTTCAAGGACAAAATTAGTTATT
[G, A]
TTTGGGTTTAAACATGAGAAATTGGCAATGAAACAAACAATTCTTTGTTGCTGG
ACTCCACCAAACAGAATGGTTTCACTCCATTGCTTCTATGAAAGAATGTTTGGT
GTAGTTCTCATAGTCAGTGCAGATCTGTGCCCTTGCATGCTTATGAAATTGGT
TGTGTGACTTTCACTTCTTACTGCAAATTGCTCTCGTGTGGGGTGGCAT
AAACAAATGCTAATTCAAGATCATGCTGACAATCAACAGAACAGTATTGAAAGTACT
 |
| 124296 | GCATGAAGTAAGTGGAGGACTAAGGAGATGAAAGGGAGTGGCCAGATAGGCAGGGGAA
AACAGGGATGAGAGTGTCTAGGGCAGGAGTGGTCAGCAGTGTCAAGTAGCTAGTGC
AAGAGGCTGAAAGGTTCTATTGAAATTAGAATAGGGAGGCTATGAGTGGCTTACAGAG
AATGGGTTCTACAGGTGAGAAATTGATCATGATCATTTGAAACAATGAAATATAGAC
AACTTTGCTCAAATGCTGGCTGGAGAAGGTAAAGGCAAGCCACAAGGGGGGCT
[C, T]
AGGTTTGGGATTAAGCCTGCTTAATTATATTATACATGAGAGGCACTTGGCAGG
GCCCTGAAAAGAGGTGAAATTGGACACAGGAAATGATTGAAAGGCATTACAGATA
AAGTTAACCTCCATTAAATTGACTTGAAGTAATAACAGTCACCCATTATTGAGGACTTC
ATGTGCCAGACAATGAACTAAGGGCTCTACATGCATTATCTCATGATCTGCCAGC
CTTTAAGAGAGAAGGTACCATTTATTCTCACTTAGAGATGTGAAACACTGAGGAAGT
 |
| 124549 | TGCTTGGCTGTGGAGGAAGGTAAAGGCAAGCCACAAGGGGGGCTTAGGTTGGAG
TTAAGGCTGCTAATTATATTACATGAGAGGCACTTGGAGCAGGCTTGGAAAAG
AGGTGAAATTGGACACAGGAAATGATTGAAAAGGCATTACAGATAAAAGTTAACCTC
ATTAAATTGACTTGAAGTAATAACAGTCACCCATTATTGAGGACTTCTCATGTCAGACA
ATGAACTAAGGGCTCTACATGCATTATCTCATGATCTTGGCCAGGCTTAAAGAG
[G, A]
AGGTACCATTTGTTATTCCACTTAGAGATGTGAAACACTGAGGAACGTGAGGGCTACCTCA
CTGTGGGTGCTGTGTGTTAGAGGTGGCAGGCAAGGACAGTCTGGTCAACACAGCT
AGAAGGAAAGTGAAGAGAGTTGTAATTGCTGCTTTAAATTGTTATTGATCATG
ATCACTTTGTCAGTACTTCACTGTGGACATCTCATCTAACATTAGTTGTTCTCTAG
TGTCAAGGGAGCCCTCTAATGGACATTATTGCACTACAGACTTCACTTCACTGCTTCA
 |
| 124858 | TTGTTATTCCACTTAGAGATGTGAAACACTGAGGAACGTGAGGGCTACCTCACTGTTGGG
GTCTGTGTGTTAGAGGTGGCAGGACTCACAGGACAGTCTGGTCAACACAGCTAGAAGGAA
GTGAAGAGAGTTGTAATTGCTGCTTTAAATTGTTATTGATCATGATCACTT
GTCACTTCACTGTGGACATCTCATCTAACATTAGTTGTTCTCTAGTGTCAAGG
GAGCCCTCTAATGGACATTATTGCACTACAGACTTCACTTCACTACATTCAAAAATT
[G, T]
AGTGCCTCTGTGGCCCAAGCACCAGCTCAGATGCTTTAGGGTGTGCAACAAAGACAG
ACATGGTCCCTGAGTTCTAAAGCAAGCTGAGGCAAGAAGGCGATGTGTGGAA
ACCCAAAGAAGATGGGGAAAGTGGCATGGGAAGGGACTGGAAAAGTTAGAGTGGCTAGATT
AGACAGAGCCCTGAAAGGCCAGGATGAAGAGACTTGTCTTAAAGTAGTGGATTGGCC
GGGGCGAGTGGTCAAGGCTGTAACCCCCAGCACTTGTGAGGGCCAAGGCTGGCGGATCAC
 |
| 125920 | TACCCCTAGATAGGGAGACAGATTCTGCAACATTGGAGCACATTAAATACCTGA
CTGTTCCAGTAATTACAAAAGAAAATAGCCCTTCTCAACTTGTCCCATGTTGGTCT
GCAGTTACACAGCAGTAATTAAAGTAGTTGGGGTCAATAATTCTCACTTGTAGATG
AAAGTTAGCCACAATCTGGCTCTGTAGGCTTATCTAATTCTGATCTAACATG
AGCATGTTGTGGCACCCAGTAGCACATGCTGAGTCACAGGTGTGACAGCTGCAATT
[A, T]
ACAAGCCTGAGAAGGGAGAAAGAAAGGCCCTCACTGTGTCCGTGAGGAGGCACT
CAAGGACTCCACCTTGTGAACACAGCGGGCAAGGAGGCAACAGGCTGGCGGATCAC
 |

FIGURE 3-57

10/506513

FIGURE 3-58

10/506513

132895 CAGGCTGGGAGGGAAATTAAATATAAAAAGTCATTTCCGGCCAGGGCTGTGGCTCAT
GCCTGTAATCCCAGCACTTGGGAGGCGGGCAGGTGGATCACTTGAGGTCAAGGAGTTCA
AGACCAGCCTGCCAACATGGGAAGCCCCATCTCTACTAAAAATACAAAAATTAGCTGG
ACTTTGTGGTGCTTGCTGTAGTCCCAGCTACTCAGGAGGCTTAGGCAGAAGAATTGCTT
GAACCTGGGAAGGGAGGTGTAAATGAGCTGAGATCACACCAACTGCACTCAGCCTGGG
[G,A]
ACAGAGACAGACTCCAGCTAAAAACAATACTGTTTTTAATCTTGTCCCTTAATGGAAA
TATTGAGAAAATGTCTAGGGAACTCGAAGGGAGATGATTATAGGAGTTGATTATGTATGT
AAAATCAAAGTGAATGAGGCAGTGGCAGGGGGAAAGGGGGAAACCGTAATGACTTAGAA
GTCCCTAACGATGTTGATGGTAATTGTGACATTGCTTCTGGAGGGGAGCTGACCTTG
TGGTGTCCGTCCTAGGTACTCTCCCTTCTTCATTGGTCTGATGTCCTGATGATTCT

133506 TCTTTGGGCCCCATTGCTGTGCCCCATCATGGGTCTTGGATGGATGCTTCATT
CCATTATGGCTCCCATAGCCTTTGAGTTAGTTGGTGCCTCAGGATGTCCTCCAAGCAATTG
GATTTCTGCTCGGATTCTATGTCATAACCCATGACTGTTGGCCCACCCATTGCAAGGTAAAT
ATAATGATTCTCCAGTAGTTATTAATTCTAGTATTCTACTTCAGGTCTTAATTAA
GTCTCATTTATGAAAACATATTACAGGTTATTGATTACTGGTCTTTTGCTTTATG
[G,A]
TGCCTTACTGGTAACATTTTAATAAGACTAGCTATTAACAGTATGTTGAATTGGTGA
AGAGTCCCTTATCCTTACTGGCAGCTAAAACACTATATAAAACACTTTGGGAGGCTGA
GGGGGGAAAGATCACCTGAGCTCAGGAGCTTAGAGACCAGCTGGACACAATAGTGAGACAC
TATCTCTACAAAAAAATAAAAAAATAAAAAAAATTAGCCAGGGTGGTGGCATGCACTGCGAG
TCCCCAGATGCAACAGGAGGCTGAGGTGGGGGGATTGCTTGAAGCCCCAGGGTCAAGGCTGCA

135473 ACACCAACACAGCAACTGGCAGCAGAACTGCTGGCTCACCAAGGAGGCTCTGAGGGC
ATCATAGTATTACAGCAGAACATAATCATGAGTGTTCATAAGGAGGAAGAGTTCAAGGAAT
GGTCGATTCCAAGATAGAAAACCTTGTGATTACAGATATTGTCTATTATATATATGC
AGAATGGATGTACACATTTTATGTGTTGGTACTTAATTGGACAAATGGTCAGCTATTAA
TTTAAACATGTCAAGATAGATATTAGTACAGTATATTCCCTGGACATTAGATAACCTA
[G,A]
GTTTATAGTATAAGTATAAGAGTTAAAAACACTAACAGATAACTTTTAAACCATGAGT
CCTGGAAATTGTTAGAGAAATTAGAAATGTGAGTACCGTAAAGTTTCAGAACGAGAA
CCCGAATATAGAAATGCCATTAAATAATTCTTATATACTTACATTTCTTCCAGGTACTTAT
AAACCTTAGTCTATTCCAAAATGTTAAACACCTAACTTTCTACCTAAATTATTAAAT
TTAAAATTCTTAATTGGATTATGATGTTAAATAGTTTCTATGTTTATTCATAAAA

136201 GACAAAACCCCATCTACAAAAAAATAAAAAATTAGCCAGGCATGGTAGCATGCACCTG
TAGTCCCAGCTACTCAAGAGGTGAGCTGGGAGGATCAATTGAGCTTGGGAAGTCAGGC
CTGCATGAGCCATGATTATGCTACCGCACTCCAGCCTGGTGACACAGTGAGACCCCTGTC
TCAAAAAAAAAAAACGCTACCTTTCTATCTTTCAAGTAATGTTGGTATGAAAATC
CAGAGGACTGTACTTTATGACAACGTTAACAGATATGAGATCTTTTCTCTATCAAAA
[A,G]
GGTTTATATTCAGATCTGTTCTAAAAAAAAAAAGCTGATGTCGAGATGTCG
AATCAGTCTCTGCGCTGATCTAGACCCCTACAGAGGCCACACTTGTCTCCCTTGGTGAC
AGCTTTTCTCCCTCTCAGGGTTACTCTGTCACAAACTGGGCTCTATGATGTCGATTCT
ACCTCGCTGGAGTCCCTCCCTTATGGAGGTGTCGTTTGTCTTATCCCGTGGATCC
ATAGTAAGAAGCAAAGAGAGATCAGTAAACCACTGGAAAAAGAAAAAGATGGAGAAAATG

137080 TGGTATATGAAAACATGTCTGAAAGTCACATATTGTAAAAATTGAAAGCTATCTCAGTAA
AAAGCAGCTTGGAAACTGTGAATGATCTTGTACAAAATGTTAAAAATACCTCA
GGCTATACTGAAAGGGTTGCAGTTGGTTAGGAGTGGAAATATTGTGTTAATGATG
TCTTCAGTTCTGGTACCTCTGTTTACTTTCTTATGCTTTGAAACTTTGCAAAT
TTAACGCTGGGTTAGATAATACCGAGTCTACCTAAACCTCAAGTCTATGTTAAAGTTG
[A,C]
TTCCCTGCTGTTAAAATAGCTATGATATTAGATATTCTGACTTGCTCCAGTGTCAAGGG
ACCTTCTGGGAGCAGGTGCTAACATAGTGTTCAGAACTAACATATGTGAGATGAAAAGGATC
CCCTCAGGAGGATCCTGAGCTGTTAGAAATCATTAAGTTACAGCTTGTCCCCCTT
GGTTTGCAAGTGGTTTACTCAAGTAGCCAGAACACCCACAGTTCTGAATTGTTA
AACTGTAACAATAAAGTAAATAGAATGCTGAAAGATATTCTGGGATTTGTAACCTAGA

FIGURE 3-59

10/506513

138022 GAAAGCTCTCAGTTGAGGACCCAAAATAAAACCAAGTCATGCCATGACCCATACTCAT
 TTACAAAAACAAGAACACTTCTCTATCCCTAAATTATGCTTTAGTACTTGAGGCCT
 TAAAAGTTAGTGTCTTGTGAAGACATTCAAGCACTTACTTTGTATACATGCAGT
 TGCCACCTTACCACTTCTAATAGTGTATTTCTATTCAGGGGACTTAGATAATTGCC
 TGTGGATGGTTCTTGTAGGAAAAAAATCTACATTTGACCCATACTACCCCTTCTATGT
 [T, C]
 CTATTATAACCTTTAGAAAATGATTCTATTCACTGTCAGTTATATAAAACGTTA
 CTTCTCATTTTGAGAAGTCACACAAACATACTACTAAAGACCAATCATCAAACCCACT
 ATTATAAAATGTTAATTGGCTGGGTAAAGGTGGCTGGCTATAATCCCAGCACTTGG
 GAGGCTGAGGAGGGAAAGATTGCTTGAGCCAGGAGTTGAGACCCAGCCTGGGCAACATAG
 CAAGATCTGTCTACTAAAAAATAGGCCAACGATAGTGGCTCATGC
 138543 GACCAGCCTGGCAACATAGCAAGATCCTGCTCTACTAAAAAATAAAAAAATTAGG
 CCAAGCATAGTGGCTCATGCCGTGTAATCCTAGCACTTGGTAGTCCAAGGCAGGGGGATC
 ACTTGAGCCCCAGAAGTCAGACAGCTTGGTAACATAATGAGACCCCTGTGCTACAAA
 AAATTTAAAAATTAGCCAGGCATGATGGTGCCCCACCTGTAGCCCCCAGCTACTCAGAGGCT
 GAGGTAGTGGAGGATTGCTTGAGCTAACAGAGATGGAGGCTGAGTGTAGCTATGCCACTG
 [A, T]
 ACTCTAGCCTGTTCAACTGAGCAGAACCCCTGTCGTAAAAGAAAATCAAAACAAAAAAT
 AAATGTTAAATTGGTTAAAGTTTGTGACAGACTCCCCCTAAACACCTTCTCCCCAA
 TTTTACAGAAAAGTAACTCAAAATGAAAACCTTACTCTGTAAGACCTCACAGTGT
 TCTTTCAAAATTGGCTGATTAGGAAAAAAGTGTGATCATCTGAAACTAAAAGAAATTG
 CTGGTTAGTTTCCATATTAAACAGCAGTGACAAGTATATAACTTAGATCTCAGCAT
 138681 AAGACCAGCTTGGTAACATAATGAGACCCCTGTCATCAAAATTTAAAAAATTAGCCA
 GGCATGATGGTGCCCCACCTGTAGCCCCAGCTACTCAGAGGCTGAGGTAGTGGAGGATTG
 CTTGAGCCTAACAGATGGAGGCTGAGTGTGAGCTATGCCACTGTACTCTAGCCTGTTCAAC
 TGAGCAGAACCCCTGTCTGAAAAGAAAATCAAAACAAAAAATGTTAAATTGGCT
 TTAAGTTTGTGACAGACTCCCCCTAAACACCTTCTCCCCAATTTCAGAAAAGTAATT
 [C, T, G, A]
 AAAAATGAAAACCTTACTCTGTAAGACCTCTACAGTGTGTTCTTTCAAAATTGGCT
 GATTTTAGGAAAAAAGTGTGATCATCTGAAACTAAAAGAAAATTGCTGGTAGTTCCATAT
 TAAAACAGCAGTGACAAGTATATAACTTAGATCTCAGCATATGTTGTTGATATTAAA
 CTTCACATATGTTAGTTTCACTGAAATGAATCAAACCTGGATCTATAACACTGAAA
 AAGTTCTATTGTAATAGACTCATACGGAGAATACTCTGCTATAATAATATAAAATTAGA

FIGURE 3-60